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L56 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:107417 HCAPLUS
DOCUMENT NUMBER: 136:151974
TITLE: **Polyurethane** dispersions in alcohol-water system with good stability
INVENTOR(S): Kantner, Steven S.; **Scholz, Matthew T.**; Lewandowski, Kevin M.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010243	A1	20020207	WO 2001-US19186	20010614

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-626028 A 20000727

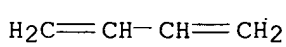
AB A **polyurethane** dispersion stable in a mixt. of alc. and water is useful in cold-seal adhesives, cosmetic applications, medical goods, etc. The dispersion comprises a reaction product of (a) .gtoreq.1 isocyanate-terminated **polyurethane** prepolymer derived from (i) .gtoreq.1 oligomeric polyactive hydrogen compd. (insol. in the alc.) which is an alkyl, aryl, or aralkyl structure, optionally substituted by N, O, and S; (ii) .gtoreq.1 polyisocyanate, and (iii) .gtoreq.1 polyactive hydrogen compd. sol. in the mixt. of alc. and water; (b) a polyfunctional chain extender; and (c) a monofunctional chain terminator; wherein the equiv. ratio of difunctional chain extender to prepolymer isocyanate is 0.60-1.20. Thus, 60 parts urethane prepolymer prepd. from isophorone diisocyanate, Kraton L 2203 (hydrogenated polybutadiene diol), Terathane 2000 (polytetramethylene oxide diol), sodiosulfopolyester diol (di-Me 5-sodiosulfoisophthalate-diethylene glycol-.epsilon.-caprolactone copolymer) and Surfynol 104 surfactant was mixed with 1.48 parts ethylenediamine (chain extender) in 76.5 parts ethanol and 13.5 parts water, coated onto a polyester film and dried at 70.degree. for 10 min, showing adhesion peel from glass 2 N/dM and peel from self 88 N/dM, resp.

IT **9003-17-2P**
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(butadiene rubber, hydroxy-terminated, polymers with polyols, polyisocyanates, diamines and hydroxy-contg. amines; **polyurethane** dispersions in alc.-water system with good stability)

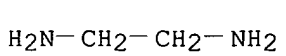
RN 9003-17-2 HCAPLUS
CN 1,3-Butadiene, homopolymer (9CI) (CA INDEX NAME)

CM 1

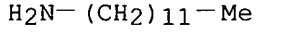
CRN 106-99-0
CMF C4 H6



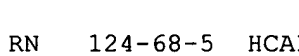
IT **107-15-3DP**, Ethylene diamine, polymers with **polyurethanes**
124-22-1DP, Dodecylamine, reaction products with
polyurethanes **124-30-1DP**, Octadecylamine, reaction
products with **polyurethanes** **124-68-5DP**,
2-Amino-2-methyl-1-propanol, polymers with **polyurethanes**
3007-31-6DP, Didodecylamine, reaction products with
polyurethanes **3965-55-7DP**, Dimethyl5-
sodiosulfoisophthalate, polymers with polyols, polyisocyanates, diamines
and hydroxy-contg. amines **4098-71-9DP**, IPDI, polymers with
polyols, diamines and hydroxy-contg. amines **25190-06-1DP**,
Terathane 2000, polymers with polyols, polyisocyanates, diamines and
hydroxy-contg. amines **25322-68-3DP**, Polyethylene glycol,
polymers with polyols, polyisocyanates, diamines and hydroxy-contg. amines
25322-69-4DP, Polypropylene glycol, polymers with polyols,
polyisocyanates, diamines and hydroxy-contg. amines **394728-16-6P**
394728-18-8P **394728-19-9P** **394728-21-3P**
394728-23-5DP, reaction products with amines **394728-24-6DP**
, reaction products with amines **394728-25-7P**
394728-27-9DP, reaction products with amines **394728-29-1P**
394728-31-5P **394728-33-7P** **394730-29-1P**
395068-49-2P
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); POF
(Polymer in formulation); TEM (Technical or engineered material use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(**polyurethane** dispersions in alc.-water system with good
stability)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)



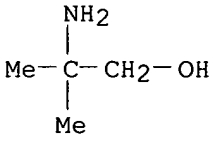
RN 124-22-1 HCAPLUS
CN 1-Dodecanamine (9CI) (CA INDEX NAME)



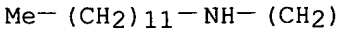
RN 124-30-1 HCAPLUS
CN 1-Octadecanamine (9CI) (CA INDEX NAME)



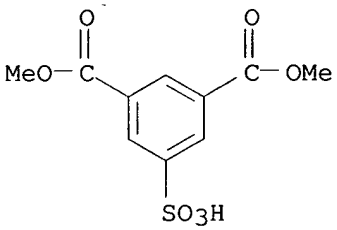
RN 124-68-5 HCAPLUS
CN 1-Propanol, 2-amino-2-methyl- (8CI, 9CI) (CA INDEX NAME)



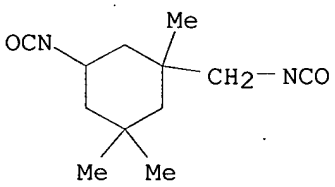
RN 3007-31-6 HCAPLUS
CN 1-Dodecanamine, N-dodecyl- (9CI) (CA INDEX NAME)



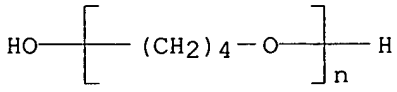
RN 3965-55-7 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt (9CI) (CA INDEX NAME)



RN 4098-71-9 HCAPLUS
CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA INDEX NAME)

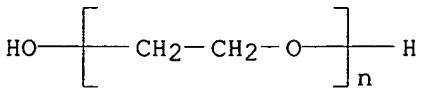


RN 25190-06-1 HCAPLUS
CN Poly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)

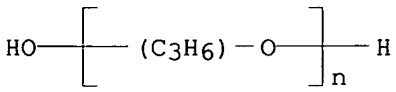


RN 25322-68-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX

NAME)



RN 25322-69-4 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 394728-16-6 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Kraton Liquid L 2203, 2-oxepanone, 2,2'-oxybis[ethanol] and 2,4,7,9-tetramethyl-5-decyne-4,7-diol, block (9CI) (CA INDEX NAME)

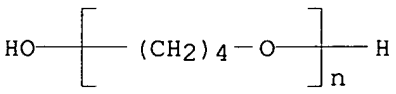
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

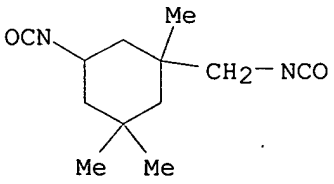
CM 2

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



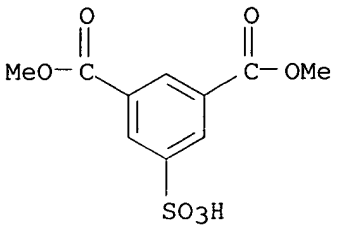
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 4

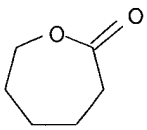
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

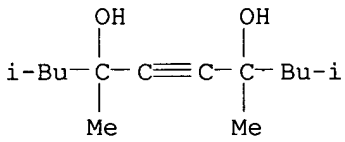
CM 5

CRN 502-44-3
CMF C6 H10 O2



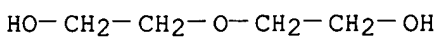
CM 6

CRN 126-86-3
CMF C14 H26 O2



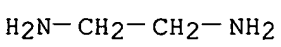
CM 7

CRN 111-46-6
CMF C4 H10 O3



CM 8

CRN 107-15-3
CMF C2 H8 N2



RN 394728-18-8 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 2-amino-2-methyl-1-propanol, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

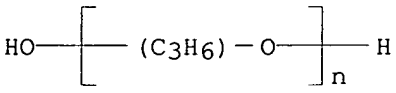
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

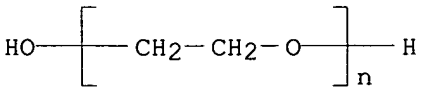
CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



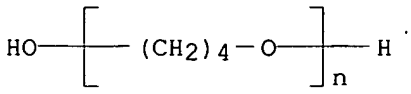
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



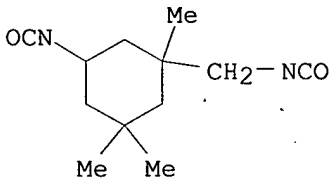
CM 4

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



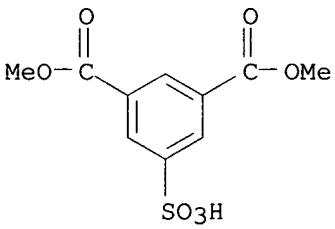
CM 5

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 6

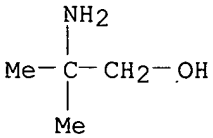
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

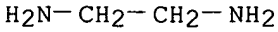
CM 7

CRN 124-68-5
CMF C4 H11 N O



CM 8

CRN 107-15-3
CMF C2 H8 N2



RN 394728-19-9 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 2-amino-2-methyl-1-propanol, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

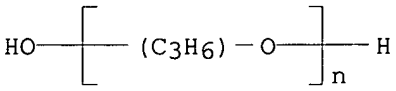
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

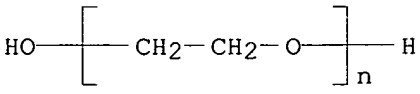
CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



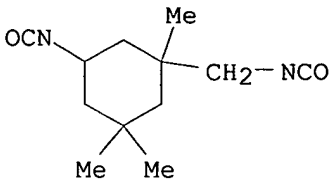
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



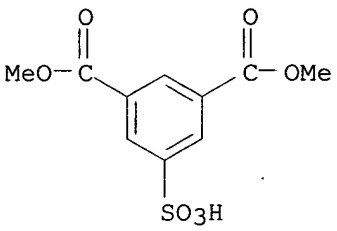
CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 5

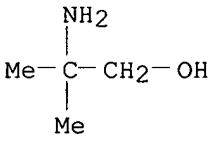
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

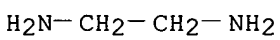
CM 6

CRN 124-68-5
CMF C4 H11 N O



CM 7

CRN 107-15-3
CMF C2 H8 N2



RN 394728-21-3 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,2-ethanediamine, 1,2-ethanediol, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Kraton Liquid L 2203 and 1,2-propanediol, block

(9CI) (CA INDEX NAME)

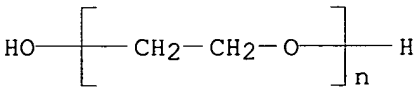
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

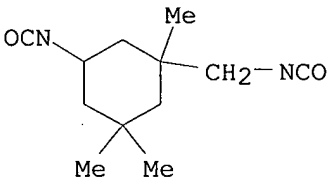
CM 2

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



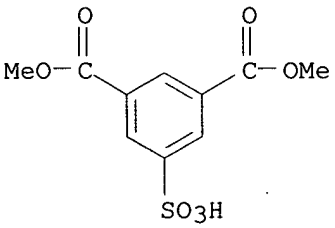
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 4

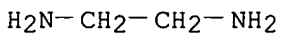
CRN 3965-55-7
CMF C10 H10 O7 S . Na



Na

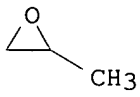
CM 5

CRN 107-15-3
CMF C2 H8 N2



CM 6

CRN 75-56-9
CMF C3 H6 O



CM 7

CRN 75-21-8
CMF C2 H4 O

RN 394728-23-5 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

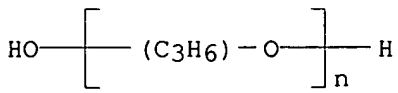
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

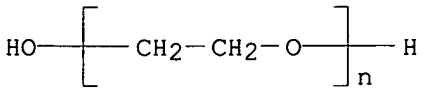
CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



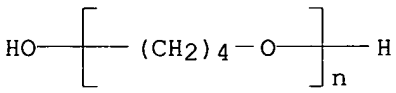
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



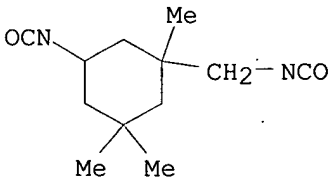
CM 4

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



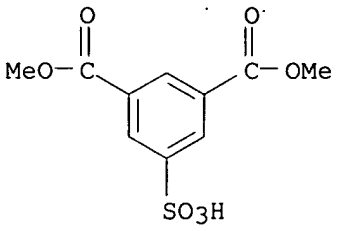
CM 5

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 6

CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 7

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 394728-24-6 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Pripol 1009 and Pripol 2033, block (9CI) (CA INDEX NAME)

CM 1

CRN 158516-85-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

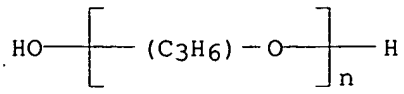
CM 2

CRN 127290-22-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

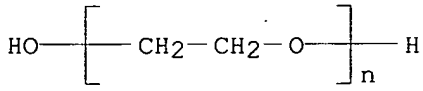
CM 3

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



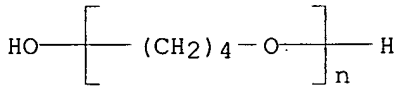
CM 4

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



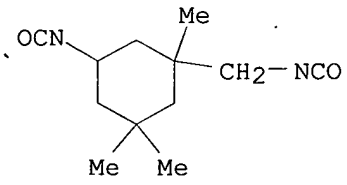
CM 5

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



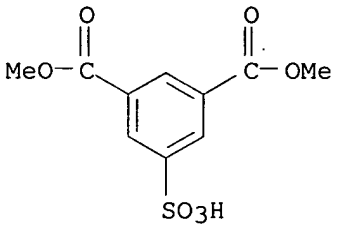
CM 6

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 7

CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 8

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 394728-25-7 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 2-amino-2-methyl-1-propanol, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Pripol 1009 and Pripol 2033, block (9CI) (CA INDEX NAME)

CM 1

CRN 158516-85-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

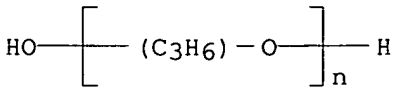
CM 2

CRN 127290-22-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

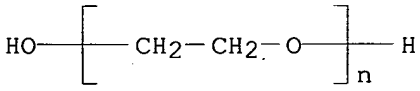
CM 3

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



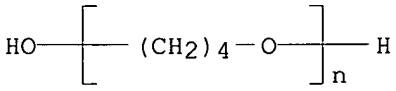
CM 4

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



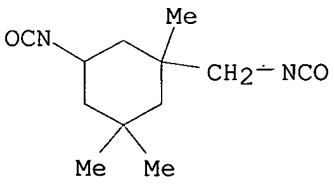
CM 5

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



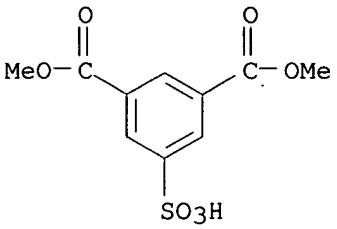
CM 6

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 7

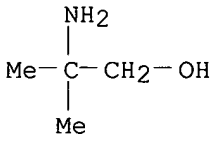
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

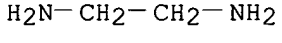
CM 8

CRN 124-68-5
CMF C4 H11 N O



CM 9

CRN 107-15-3
CMF C2 H8 N2



RN 394728-27-9 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

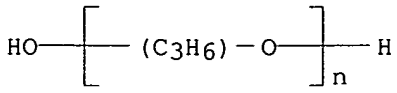
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

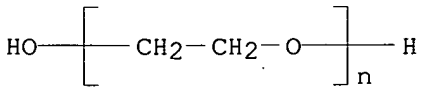
CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



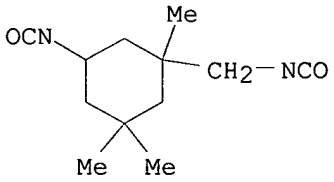
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



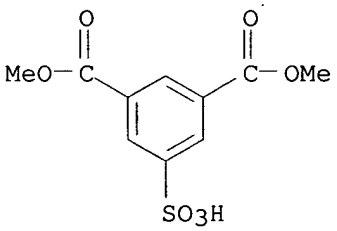
CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 5

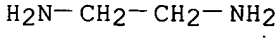
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 6

CRN 107-15-3
CMF C2 H8 N2



RN 394728-29-1 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 2-amino-2-methyl-1-propanol, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203 (9CI) (CA INDEX NAME)

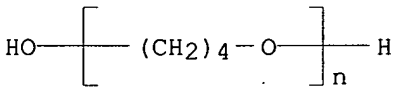
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

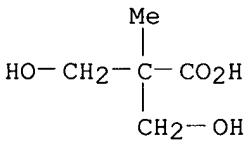
CM 2

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



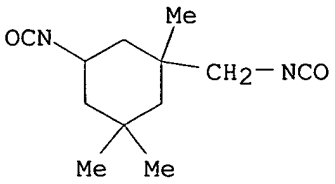
CM 3

CRN 4767-03-7
CMF C5 H10 O4



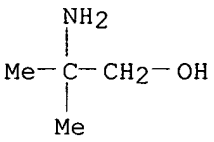
CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



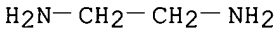
CM 5

CRN 124-68-5
CMF C4 H11 N O



CM 6

CRN 107-15-3
CMF C2 H8 N2



RN 394728-31-5 HCAPLUS
CN 1-Propanol, 2-amino-2-methyl-, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

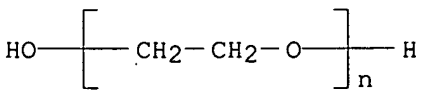
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

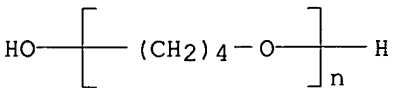
CM 2

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



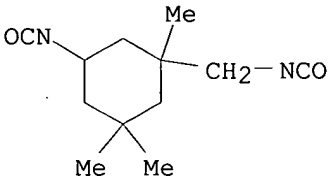
CM 3

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



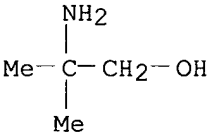
CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



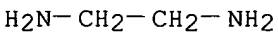
CM 5

CRN 124-68-5
CMF C4 H11 N O



CM 6

CRN 107-15-3
CMF C2 H8 N2



RN 394728-33-7 HCAPLUS
CN 1-Propanol, 2-amino-2-methyl-, polymer with 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

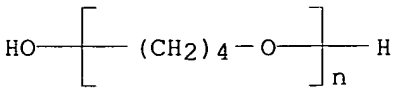
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

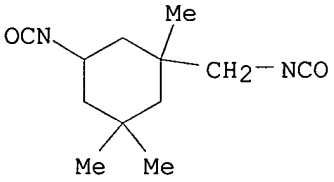
CM 2

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



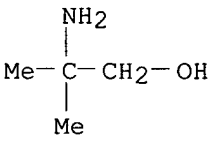
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



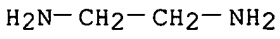
CM 4

CRN 124-68-5
CMF C4 H11 N O



CM 5

CRN 107-15-3
CMF C2 H8 N2



RN 394730-29-1 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Kraton Liquid L 2203, methyloxirane, methyloxirane polymer with oxirane bis(2-aminopropyl) ether and oxirane, block (9CI) (CA INDEX NAME)

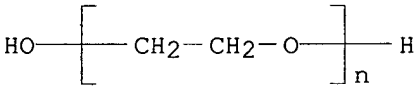
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

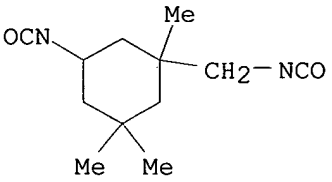
CM 2

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



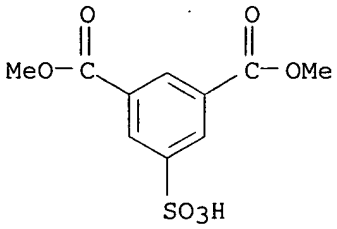
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 4

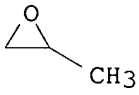
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 5

CRN 75-56-9
CMF C3 H6 O



CM 6

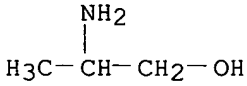
CRN 75-21-8
CMF C2 H4 O

CM 7

CRN 65605-36-9
CMF C3 H9 N O . 1/2 (C3 H6 O . C2 H4 O)x
CDES 8:GD

CM 8

CRN 6168-72-5
CMF C3 H9 N O



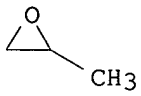
CM 9

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 10

CRN 75-56-9
CMF C3 H6 O



CM 11

CRN 75-21-8
CMF C2 H4 O

RN 395068-49-2 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 2-amino-2-methyl-1-propanol, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Kraton Liquid L 2203, methyloxirane and oxirane, block (9CI) (CA INDEX NAME)

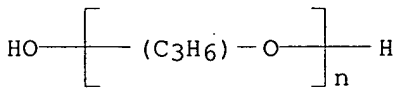
CM 1

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

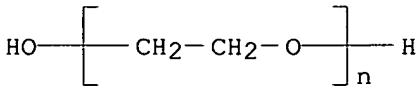
CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



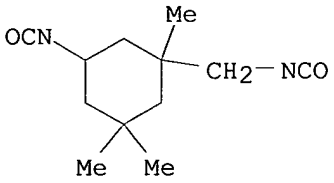
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



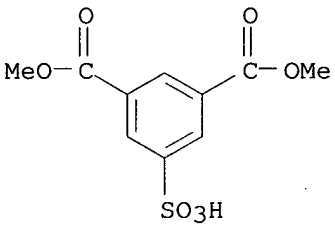
CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 5

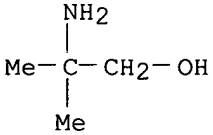
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

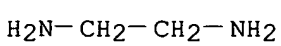
CM 6

CRN 124-68-5
CMF C4 H11 N O



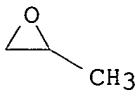
CM 7

CRN 107-15-3
CMF C2 H8 N2



CM 8

CRN 75-56-9
CMF C3 H6 O



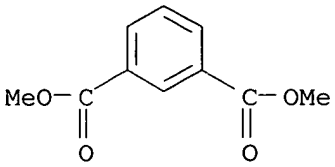
CM 9

CRN 75-21-8
CMF C2 H4 O

IT **183274-48-8P**, Dimethyl 5-sodiosulfoisophthalate-polyethylene glycol copolymer **220118-45-6P 394728-13-3P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(**polyurethane** dispersions in alc.-water system with good stability)
RN 183274-48-8 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, sulfo-, 1,3-dimethyl ester, sodium salt, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 30675-44-6
CMF C10 H10 O7 S . Na
CCI IDS
CDES 8:ID,RING

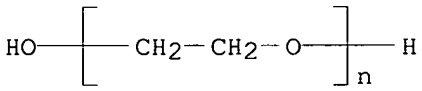


D1—SO_3H

● Na

CM 2

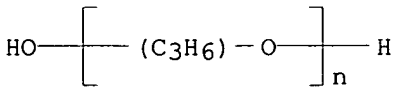
CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



RN 220118-45-6 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], block (9CI) (CA INDEX NAME)

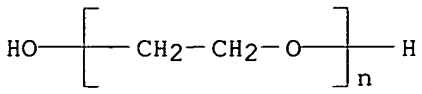
CM 1

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



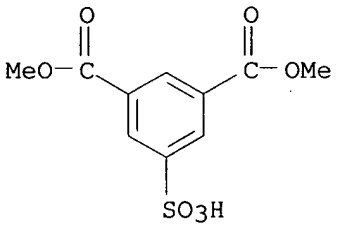
CM 2

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 3

CRN 3965-55-7
CMF C10 H10 O7 S . Na

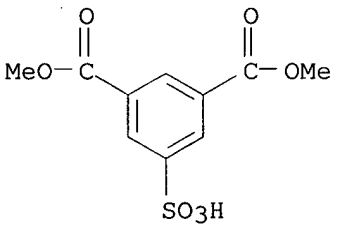


● Na

RN 394728-13-3 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 2-oxepanone and 2,2'-oxybis[ethanol], block (9CI) (CA INDEX NAME)

CM 1

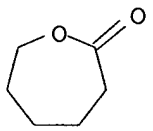
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 2

CRN 502-44-3
CMF C6 H10 O2



CM 3

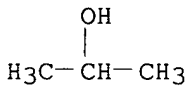
CRN 111-46-6
CMF C4 H10 O3

HO—CH_2—CH_2—O—CH_2—CH_2—OH

IT **64-17-5**, Ethanol, uses **67-63-0**, 2-Propanol, uses **71-23-8**, n-Propanol, uses **7732-18-5**, Water, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**polyurethane** dispersions in alc.-water system with good stability)
RN 64-17-5 HCAPLUS
CN Ethanol (9CI) (CA INDEX NAME)

H_3C—CH_2—OH

RN 67-63-0 HCAPLUS
CN 2-Propanol (9CI) (CA INDEX NAME)



RN 71-23-8 HCAPLUS
CN 1-Propanol (9CI) (CA INDEX NAME)

H_3C—CH_2—CH_2—OH

RN 7732-18-5 HCAPLUS
CN Water (8CI, 9CI) (CA INDEX NAME)

H_2O

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 2

L56 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:107416 HCAPLUS
DOCUMENT NUMBER: 136:167821
TITLE: **Polyurethane** film-forming dispersions in alcohol-water system and their manufacture for use in antimicrobial compositions
INVENTOR(S): **Scholz, Matthew T.**; Kantner, Steven S.; Comstock, Kristen L.; Brown, Christopher J.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010242	A1	20020207	WO 2000-US32962	20001204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-627110 A 20000727

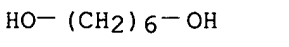
AB The dispersion is stable in an lower alc.-H2O mixt. The dispersion is (a) prepolymer reaction product of (i) .gtoreq.1 oligomeric polyactive H compd., where the compd. is an alkyl, aryl, or aralkyl structure optionally substituted in and/or on the chain by N, O, S and combinations, and where the compd. is insol. in 50:50 (wt%) alc.-H2O mixt., (ii) .gtoreq.1 polyisocyanate, and (iii) .gtoreq.1 polyactive H compd. sol. in the alc.-H2O mixt. selected from compd. contg. an ionic group, a compd. contg. a moiety capable of forming an ionic group, a compd. contg. a polyester, polyether, or polycarbonate group having a C/O ratio .ltoreq.5, and mixts., and (b) .gtoreq.1 polyfunctional chain extender. Thus, an example polymer was formed from Kraton L 2203, Terathane 2000, sodiosulfopolyester diol, Surfynol 102 surfactant, Desmodur I, and ethylenediamine chain extender.

IT **25214-14-6DP**, Adipic acid-1,6-hexanediol-neopentyl glycol copolymer, **polyurethane** derivs.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Fomrez E 65-56; **polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 25214-14-6 HCAPLUS
CN Hexanedioic acid, polymer with 2,2-dimethyl-1,3-propanediol and 1,6-hexanediol (9CI) (CA INDEX NAME)

CM 1

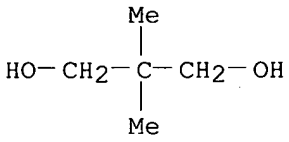
CRN 629-11-8

CMF C6 H14 O2



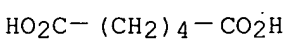
CM 2

CRN 126-30-7
CMF C5 H12 O2



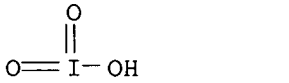
CM 3

CRN 124-04-9
CMF C6 H10 O4

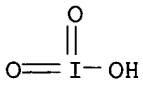


IT **7553-56-2**, Iodine, uses **7681-55-2**, Sodium iodate **7758-05-6**, Potassium iodate **18472-51-0**, Chlorhexidine gluconate **25655-41-8**, Povidone-iodine
RL: MOA (Modifier or additive use); USES (Uses)
(antimicrobial; **polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 7553-56-2 HCAPLUS
CN Iodine (8CI, 9CI) (CA INDEX NAME)

RN 7681-55-2 HCAPLUS
CN Iodic acid (HIO3), sodium salt (8CI, 9CI) (CA INDEX NAME)



RN 7758-05-6 HCAPLUS
CN Iodic acid (HIO3), potassium salt (8CI, 9CI) (CA INDEX NAME)



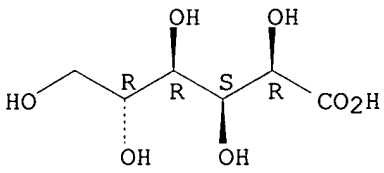
● K

RN 18472-51-0 HCAPLUS
CN D-Gluconic acid, compd. with N,N''-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazatetradecanediimidamide (2:1) (9CI) (CA INDEX NAME)

CM 1

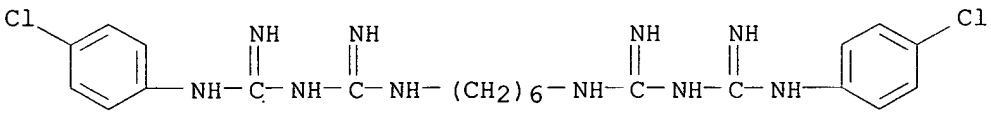
CRN 526-95-4
CMF C6 H12 O7
CDES 5:D-GLUCO

Absolute stereochemistry.



CM 2

CRN 55-56-1
CMF C22 H30 Cl2 N10



RN 25655-41-8 HCAPLUS
CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

CRN 7553-56-2
CMF I2

I—I

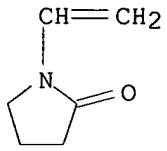
CM 2

CRN 9003-39-8

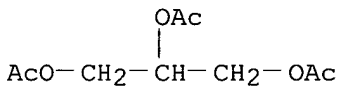
CMF (C6 H9 N O)x
CCI PMS

CM 3

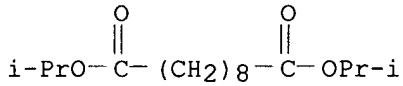
CRN 88-12-0
CMF C6 H9 N O



IT **102-76-1**, Triacetin **7491-02-3**, Diisopropylsebacate
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer; **polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 102-76-1 HCAPLUS
CN 1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)



RN 7491-02-3 HCAPLUS
CN Decanedioic acid, bis(1-methylethyl) ester (9CI) (CA INDEX NAME)



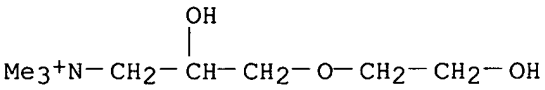
IT **81859-24-7**, Celquat sc 230m
RL: POF (Polymer in formulation); USES (Uses)
(**polyurethane** blend; **polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 81859-24-7 HCAPLUS
CN Cellulose, 2-hydroxyethyl 2-[2-hydroxy-3-(trimethylammonio)propoxy]ethyl 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (9CI) (CA INDEX NAME)

CM 1

CRN 170553-71-6
CMF C8 H20 N O3 . x C6 H16 N O2 . x C2 H6 O2 . x Unspecified
CDES 8:GD

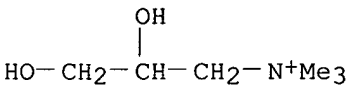
CM 2

CRN 170344-46-4
CMF C8 H20 N O3



CM 3

CRN 44814-66-6
CMF C6 H16 N O2



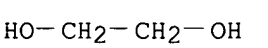
CM 4

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

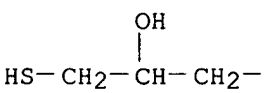
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 107-21-1
CMF C2 H6 O2



IT **96-27-5DP**, 3-Mercapto-1,2-propanediol, **polyurethane** derivs. **107-15-3DP**, Ethylenediamine, **polyurethane** derivs. **79103-62-1DP**, Desmodur W, **polyurethane** derivs. **396103-26-7P 396103-29-0P 396103-32-5P 396103-36-9P 396103-38-1P 396103-40-5DP**, reaction products with octanol **396103-40-5P 396103-42-7P 396103-45-0P 396103-47-2P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 96-27-5 HCAPLUS
CN 1,2-Propanediol, 3-mercapto- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-NH_2$

RN 79103-62-1 HCAPLUS
CN Desmodur W (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 396103-26-7 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), Kraton Liquid L 2203, 2-oxepanone, 2,2'-oxybis[ethanol] and 2,4,7,9-tetramethyl-5-decyne-4,7-diol, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

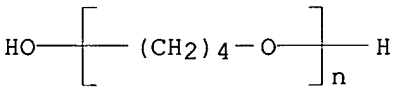
CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

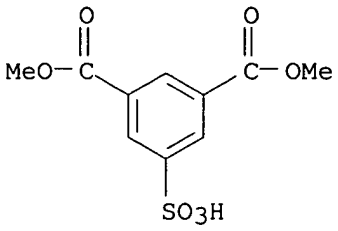
CM 3

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



CM 4

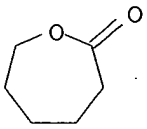
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

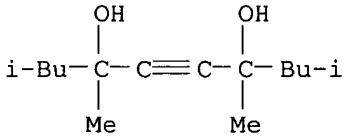
CM 5

CRN 502-44-3
CMF C6 H10 O2



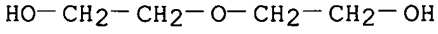
CM 6

CRN 126-86-3
CMF C14 H26 O2



CM 7

CRN 111-46-6
CMF C4 H10 O3



CM 8

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 396103-29-0 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with Acclaim 3201, Desmodur W and 1,2-ethanediamine, block, potassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 396103-28-9
CMF (C5 H10 O4 . C2 H8 N2 . Unspecified . Unspecified)x
CCI PMS
CDES 8:PM,BLOCK

CM 2

CRN 188571-35-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

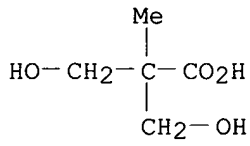
CM 3

CRN 79103-62-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 4767-03-7
CMF C5 H10 O4



CM 5

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 396103-32-5 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with Desmodur W, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] and .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]], block, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 396103-31-4
CMF (C5 H10 O4 . (C3 H6 O)n (C3 H6 O)n (C3 H6 O)n C3 H8 O3 . (C3 H6 O)n H2 O . C2 H8 N2 . Unspecified)x
CCI PMS
CDES 8:PM,BLOCK

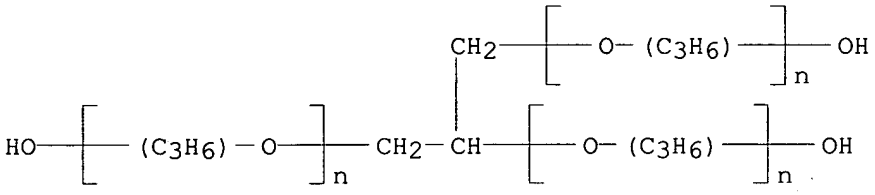
CM 2

CRN 79103-62-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

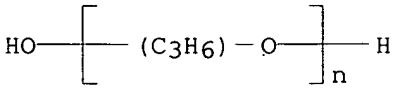
CM 3

CRN 25791-96-2
CMF (C3 H6 O)n (C3 H6 O)n (C3 H6 O)n C3 H8 O3
CCI IDS, PMS
CDES 8:ID



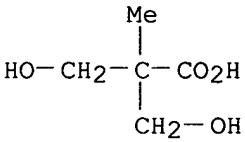
CM 4

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



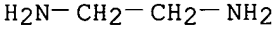
CM 5

CRN 4767-03-7
CMF C5 H10 O4



CM 6

CRN 107-15-3
CMF C2 H8 N2



RN 396103-36-9 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with Acclaim 2200, Desmodur W, 1,2-ethanediamine and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], block, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 396103-35-8
CMF (C5 H10 O4 . (C3 H6 O)n H2 O . C2 H8 N2 . Unspecified . Unspecified)x
CCI PMS
CDES 8:PM,BLOCK

CM 2

CRN 188571-34-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

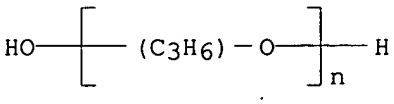
CM 3

CRN 79103-62-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

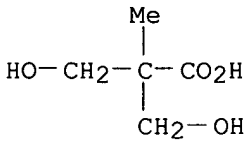
CM 4

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



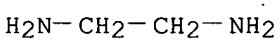
CM 5

CRN 4767-03-7
CMF C5 H10 O4



CM 6

CRN 107-15-3
CMF C2 H8 N2



RN 396103-38-1 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], Kraton Liquid L 2203 and Priplast 3192, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

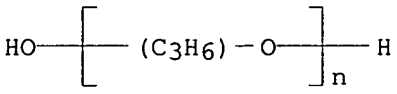
CRN 157630-15-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

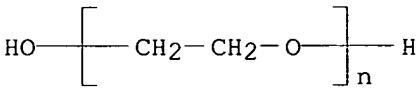
CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS

CDES 8:ID



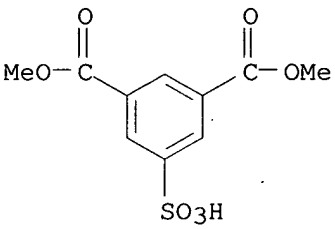
CM 5

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 6

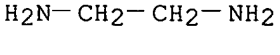
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 7

CRN 107-15-3
CMF C2 H8 N2



RN 396103-40-5 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

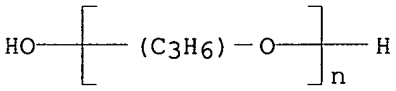
CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

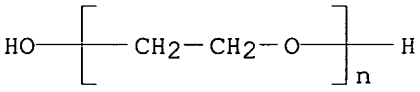
CM 3

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



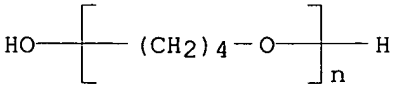
CM 4

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



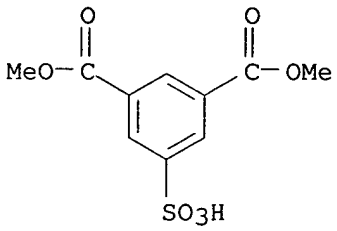
CM 5

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



CM 6

CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 7

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 396103-40-5 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] and Kraton Liquid L 2203, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

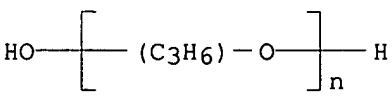
CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

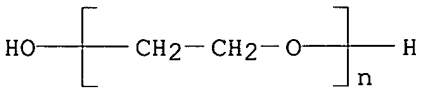
CM 3

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



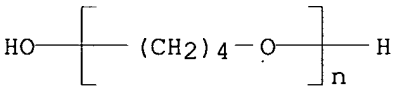
CM 4

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



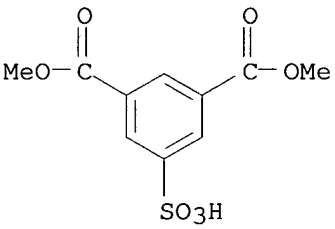
CM 5

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



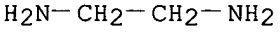
CM 6

CRN 3965-55-7
CMF C10 H10 O7 S . Na



CM 7

CRN 107-15-3
CMF C2 H8 N2



RN 396103-42-7 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt,

polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], Pripol 1009 and Pripol 2033, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 158516-85-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

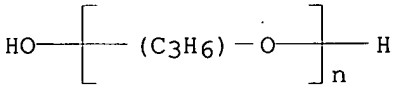
CM 3

CRN 127290-22-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

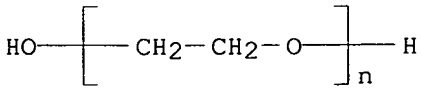
CM 4

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



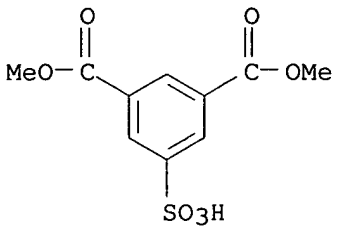
CM 5

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 6

CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

CM 7

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

RN 396103-45-0 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with N,N-bis(2-aminoethyl)-1,2-ethanediamine, Desmodur I, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], Kraton Liquid L 2203 and Priplast 3192, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

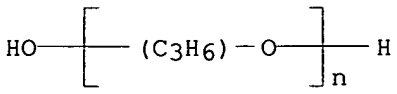
CRN 157630-15-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

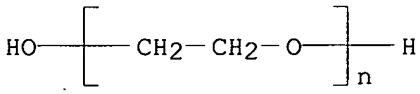
CRN 25322-69-4

CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



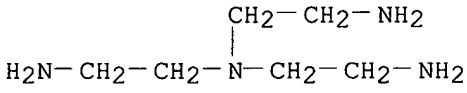
CM 5

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



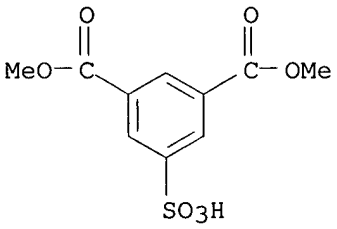
CM 6

CRN 4097-89-6
CMF C6 H18 N4



CM 7

CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

RN 396103-47-2 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with Desmodur I, 1,2-ethanediamine, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-

ethanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], Kraton Liquid L 2203 and 2,4,7,9-tetramethyl-5-decyne-4,7-diol, block (9CI) (CA INDEX NAME)

CM 1

CRN 202149-37-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

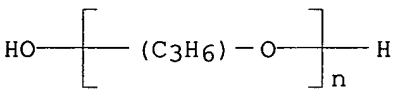
CM 2

CRN 191617-94-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

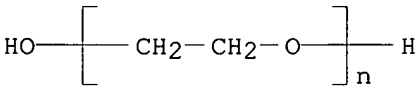
CM 3

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



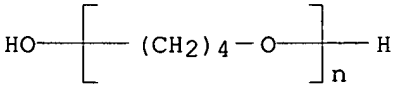
CM 4

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



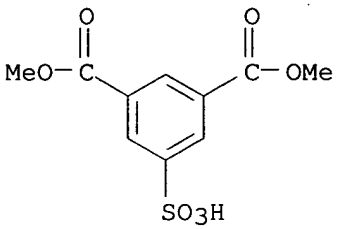
CM 5

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



CM 6

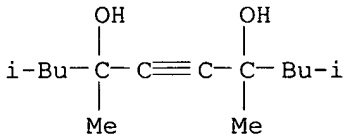
CRN 3965-55-7
CMF C10 H10 O7 S . Na



● Na

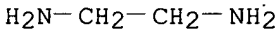
CM 7

CRN 126-86-3
CMF C14 H26 O2

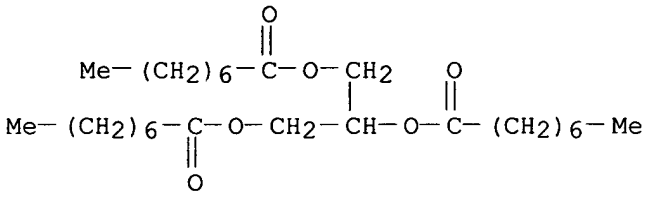


CM 8

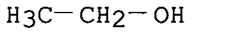
CRN 107-15-3
CMF C2 H8 N2



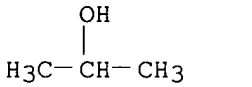
IT **538-23-8**, Crodamol GTCC
RL: MOA (Modifier or additive use); USES (Uses)
(**polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 538-23-8 HCAPLUS
CN Octanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



IT **64-17-5**, Ethanol, uses **67-63-0**, 2-Propanol, uses
71-23-8, n-Propanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**polyurethane** dispersions in iso-Pr alc.-water system and manuf. for use in antimicrobial compns. and film-forming surgical drapes)
RN 64-17-5 HCAPLUS
CN Ethanol (9CI) (CA INDEX NAME)



RN 67-63-0 HCAPLUS
CN 2-Propanol (9CI) (CA INDEX NAME)



RN 71-23-8 HCAPLUS
CN 1-Propanol (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 1

L45 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:479570 HCAPLUS
DOCUMENT NUMBER: 129:126909
TITLE: Cationic **film**-forming polymer compositions for topical delivery of agents to the skin and hair
INVENTOR(S): Samour, Carlos; Krauser, Scott F.
PATENT ASSIGNEE(S): Macrochem Corp., USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9828355	A1	19980702	WO 1997-US23999	19971223
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, PL, RU, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5807957	A	19980915	US 1996-771990	19961223
US 5906822	A	19990525	US 1997-937649	19970925
AU 9859036	A1	19980717	AU 1998-59036	19971223
EP 946621	A1	19991006	EP 1997-954868	19971223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001507386	T2	20010605	JP 1998-529088	19971223

PRIORITY APPLN. INFO.: US 1996-771990 A 19961223
US 1995-496413 B3 19950629
WO 1997-US23999 W 19971223

AB A mixt. of lipophilic and amphiphilic/hydrophilic **film**-forming polymers R(CO)mY1(CH2CHR1O)n[CONHZNHCO(OCH2CHR2)n'Y2(CH2CHR2O)n'']pCONHZNHCO(OCH2CHR1)nY1(CO)mR where R represents (i) an alkyl, alkenyl or alkaryl group of from 1 to 30 carbon atoms or (ii) a polypropylene oxide group or polybutylene oxide group; R1 and R2, each, independently, represent a hydrogen atom, or a Me or Et group; Z represents a divalent linking hydrocarbyl group; m is 0 or 1; when m = 0, Y1 represents O, NR3 or N+R3R4X- and when m = 1 Y1 represents O; Y2 represents O, NR3, N+R3R4X-, (R3NCH2CH2)t, or [(R3R4N+CH2CH2)X-]t; R3 and R4, independently, represent C1-C22 alkyl; X represents an anion; t is a pos. integer; n and n', are each, independently, a pos. no. and p is >0, provide a skin substantive, occlusive moisture barrier covering for skin or hair. When Y1 and Y2 are O the polymers are nonionic in character when Y1 or Y2 represents NR3 or N+R3R4X- the polymers are cationic in character. The compns. have a moisturizing effect by reducing transepidermal water loss. The lipophilic or amphiphilic or hydrophilic **film**-forming polymers may be used individually or as mixts. as a delivery system for delivering pharmacol. or cosmetic agents to the skin or hair. A polymer was prepd. fro dicyclomethane 4,4'-diisocyanate, Ethoquad 18/25, and polyoxyethylene stearyl ether. A moisturizing lotion was prepd. contg. this polymer.

IT **210243-08-6P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cationic **film**-forming polymer compns. for topical delivery to the skin and hair)

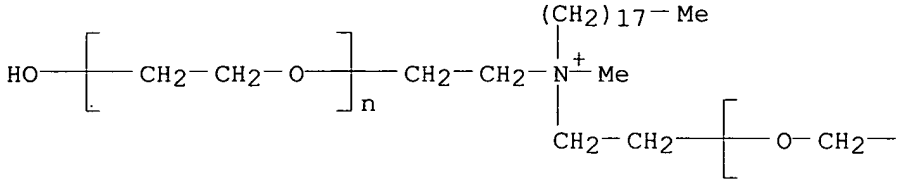
RN 210243-08-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-

ethanediyl]bis[.omega.-hydroxy-, chloride, polymer with 1,1'-methylenebis[4-isocyanatocyclohexane] and .alpha.-octadecyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

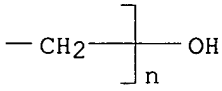
CRN 28724-32-5
CMF (C2 H4 O)n (C2 H4 O)n C23 H50 N O2 . Cl
CCI PMS

PAGE 1-A



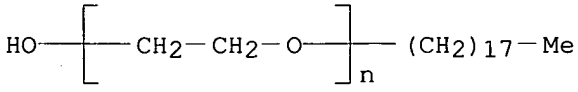
● Cl^-

PAGE 1-B



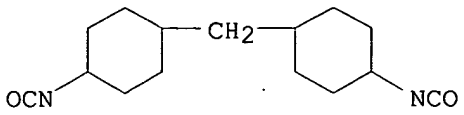
CM 2

CRN 9005-00-9
CMF (C2 H4 O)n C18 H38 O
CCI PMS



CM 3

CRN 5124-30-1
CMF C15 H22 N2 O2



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L45 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
IC ICM C08G018-48
ICS C08G018-50; A61K031-27; A61L015-42
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 63
ST cationic **film** forming polymer skin hair; polyoxyalkylene urethane topical delivery skin hair
IT Acne
Antibiotics
Antitumor agents
Cosmetics
Fungicides
Hair preparations
Local anesthetics
Psoriasis
Sunscreens
Topical drug delivery systems
(cationic **film**-forming polymer compns. for topical delivery to the skin and hair)
IT Polyoxyalkylene-polyurethanes
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cationic **film**-forming polymer compns. for topical delivery to the skin and hair)
IT Hormones (animal), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cationic **film**-forming polymer compns. for topical delivery to the skin and hair)
IT **210243-08-6P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cationic **film**-forming polymer compns. for topical delivery to the skin and hair)

=> d ibib abs hitstr 2

L45 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:470926 HCAPLUS
DOCUMENT NUMBER: 117:70926
TITLE: Manufacture of particulate polymers
INVENTOR(S): Kataoka, Hironori; Jinno, Kazuto; Yamashita, Tokiko
PATENT ASSIGNEE(S): Daiichi Kogyo Seiyaku K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04076016	A2	19920310	JP 1990-189965	19900718

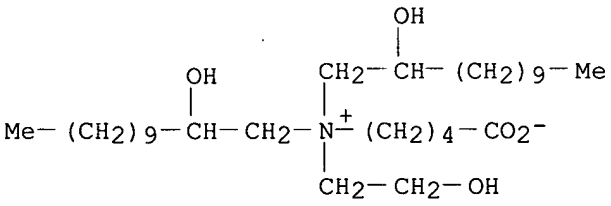
AB The title particulates, useful as matting agents for **coatings**, additives for adhesives and cosmetics, and for manuf. of release-controlled drugs or pesticides, are prepd. by emulsifying a mixt. of diisocyanates, polyisocyanates, urethane prepolymers, surfactants bearing .gtoreq.2 OH groups, and a protective colloid, then curing the mixt. Thus, stirring 100 g 3:1 trimethylolpropane-TDI prepolymer with 30 g C2H4O-C3H6O block copolymer, adding 700 g 2% aq. poly(acrylic acid) Na salt soln., and stirring at 40.degree. for 5 h gave particles with av. diam. 110 .mu.m.

IT **142807-54-3P**
RL: PREP (Preparation)
(particles, with uniform size, manuf. of)

RN 142807-54-3 HCAPLUS
CN 1-Dodecanaminium, N-(4-carboxybutyl)-2-hydroxy-N-(2-hydroxydodecyl)-N-(2-hydroxyethyl)-, inner salt, polymer with 1,3-diisocyanatomethylbenzene and 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (9CI) (CA INDEX NAME)

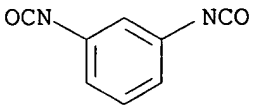
CM 1

CRN 134845-59-3
CMF C31 H63 N O5



CM 2

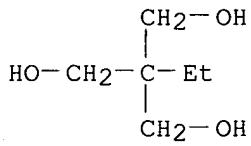
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1—Me

CM 3

CRN 77-99-6
CMF C6 H14 O3



=> d ind 2

L45 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
IC ICM C08G018-08
ICS C08G018-08; C08G018-72
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 5, 38, 42, 63
ST polyurethane particle **coating** matting agent; controlled release pesticide particle; drug particle controlled release; polyoxypropylene polyoxyethylene polyurethane particle manuf
IT **Coating** materials
(matting agents for, polyurethane particles as)
IT Castor oil
RL: USES (Uses)
(monosulfate, polymers with isocyanates, for particles, manuf. of)
IT Urethane polymers, preparation
RL: PREP (Preparation)
(particles, with even particle size, manuf. of)
IT Essential oils
RL: USES (Uses)
(lemon, polyurethane particles contg., manuf. of)
IT Surfactants
(nonionic, in polyurethane particle manuf.)
IT 26087-47-8P, O,O-Diisopropyl-S-benzylthiophosphate
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**fungicides**, polyurethane particles contg., manuf. of)
IT 88108-26-3P, Pyrethrin
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BIOL (Biological study); PREP (Preparation); USES (Uses)
(insecticides, polyurethane particles contg., manuf. of)
IT 142816-66-8P
RL: PREP (Preparation)
(particles, prepn. of, for suede-finish **coatings**)

IT 101-68-8DP, polymers with castor oil monosulfate 4098-71-9DP, polymers with polypropylene glycol glycerol ether and castor oil 25791-96-2DP, polymers with isophorone diisocyanate and castor oil 25854-16-4DP, Xylylene diisocyanate, polymers with castor oil monosulfate 142708-71-2P 142708-72-3P **142807-54-3P**
RL: PREP (Preparation)
(particles, with uniform size, manuf. of)

IT 50-78-2, Aspirin 541-91-3, Muscone 9001-22-3, .beta.-Glucosidase
RL: USES (Uses)
(polyurethane particles contg., manuf. of)

=> d ibib abs hitstr 1

L13 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:129295 HCAPLUS
DOCUMENT NUMBER: 130:325648
TITLE: Surface modification of segmented polyurethanes by grafting methacrylates and phosphatidylcholine polar headgroups to improve hemocompatibility
AUTHOR(S): Li, Yu-Jun; Hanada, Tomohiro; Nakaya, Tadao
CORPORATE SOURCE: Department of Bio-applied Chemistry Faculty of Engineering, Osaka City University, Sumiyoshi-ku Osaka, 5588585, Japan
SOURCE: Chem. Mater. (1999), 11(3), 763-770
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

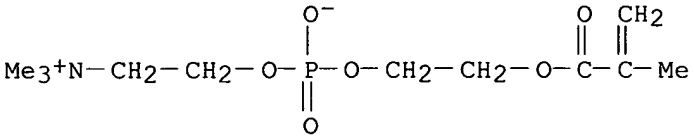
AB A new type of phosphatidylcholine-contg. segmented polyurethane surface was produced by grafting various methacrylates and phosphatidylcholine polar headgroups to a vinyl-group-contg. segmented polyurethane (V-SPU) using AIBN as a radical initiator. 1,4-Butanediol as chain extender was used to synthesize the V-SPU, which is based on MDI and vinyl-group-contg. polybutadiene diol. Several methacrylates, such as Me methacrylate (MMA), Bu methacrylate, stearyl methacrylate, and a phosphatidylcholine polar-headgroup-contg. vinyl monomer, 2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate (MTP), were grafted to the V-SPU. The bulk characteristics of the grafted V-SPUs were investigated by IR spectroscopy, viscosity, and gel-permeation chromatog. measurements. Mech. properties of MMA-grafted V-SPU were measured by dynamic viscoelasticity and tensile measurements. The phosphatidylcholine polar headgroups were oriented on the surface of these materials, as revealed by attenuated total reflectance FTIR, ESCA, and contact angle measurements. The MTP-grafted SPU surfaces showed slightly decreased water contact angles, also indicating that hydrophilic phosphatidylcholine polar headgroups are present at the surface. The hemocompatibility in vitro was evaluated with platelet-rich plasma contact tests and viewed by SEM using ungrafted V-SPU as a ref. It was found that fewer platelets adhered to the modified surfaces and showed less shape variation than to the unmodified V-SPU. Platelet adhesion to MTP-grafted polymers was inhibited 88-95% compared with unmodified V-SPU.

IT **223801-76-1P 223801-78-3P**, Butadiene-1,4-butanediol-butyl methacrylate-MDI-2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate block graft copolymer **223801-80-7P**, Butadiene-1,4-butanediol-MDI-2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate-stearyl methacrylate block graft copolymer
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and hemocompatibility of)

RN 223801-76-1 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,3-butadiene, 1,4-butanediol, 1,1'-methylenebis[4-isocyanatobenzene] and methyl 2-methyl-2-propenoate, block, graft (9CI) (CA INDEX NAME)

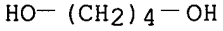
CM 1

CRN 67881-98-5
CMF C11 H22 N O6 P



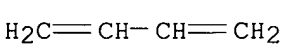
CM 2

CRN 110-63-4
CMF C4 H10 O2



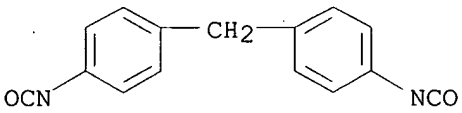
CM 3

CRN 106-99-0
CMF C4 H6



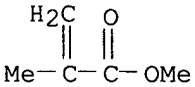
CM 4

CRN 101-68-8
CMF C15 H10 N2 O2



CM 5

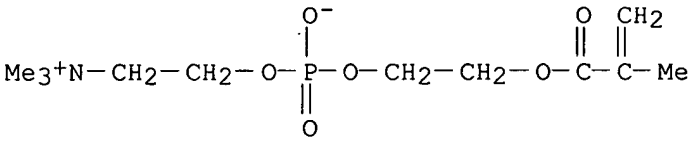
CRN 80-62-6
CMF C5 H8 O2



RN 223801-78-3 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,3-butadiene, 1,4-butanediol, butyl 2-methyl-2-propenoate and 1,1'-methylenebis[4-isocyanatobenzene], block, graft (9CI) (CA INDEX NAME)

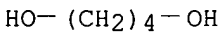
CM 1

CRN 67881-98-5
CMF C11 H22 N O6 P



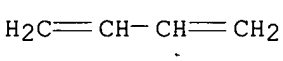
CM 2

CRN 110-63-4
CMF C4 H10 O2



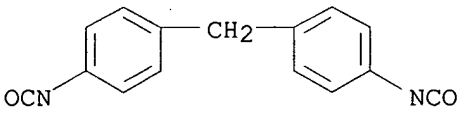
CM 3

CRN 106-99-0
CMF C4 H6



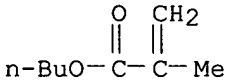
CM 4

CRN 101-68-8
CMF C15 H10 N2 O2



CM 5

CRN 97-88-1
CMF C8 H14 O2

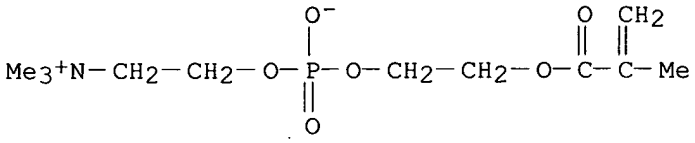


RN 223801-80-7 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,3-butadiene,

1,4-butanediol, 1,1'-methylenebis[4-isocyanatobenzene] and octadecyl 2-methyl-2-propenoate, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67881-98-5
CMF C11 H22 N O6 P



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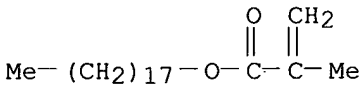
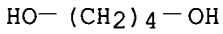


CM 3

CRN 110-63-4
CMF C4 H10 O2



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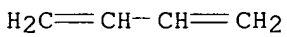
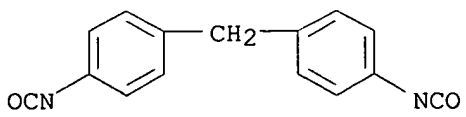
CRN 106-99-0
CMF C4 H6



CM 5

CRN 101-68-8
CMF C15 H10 N2 O2



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 2

L13 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:392152 HCAPLUS
DOCUMENT NUMBER: 129:58850
TITLE: Extended wear ophthalmic lens containing oxyperm macromer/ionoperm monomer copolymer
INVENTOR(S): Nicolson, Paul Clement; Baron, Richard Carlton; Chabrecek, Peter; Court, John; Domschke, Angelika; Griesser, Hans Jorg; Ho, Arthur; Hopken, Jens; Laycock, Bronwyn Glenice; Liu, Qin; Lohmann, Dieter; Meijs, Gordon Francis; Papaspiliotopoulos, Eric; Riffle, Judy Smith; Schindhelm, Klaus; Sweeney, Deborah; Terry, Wilson Leonard, Jr.; Vogt, Jurgen; Winterton, Lynn Cook
PATENT ASSIGNEE(S): Ciba Vision Corp., USA; Commonwealth Scientific and Industrial Research Organisation
SOURCE: U.S., 38 pp. Cont.-in-part of U.S. 301,166, abandoned. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5760100	A	19980602	US 1995-569816	19951208
US 5760100	B1	20001114		
TW 393498	B	20000611	TW 1995-84108480	19950815
CA 2213357	AA	19961010	CA 1996-2213357	19960322
CA 2215118	AA	19961010	CA 1996-2215118	19960322
WO 9631791	A1	19961010	WO 1996-EP1255	19960322
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KP, KR, LK, LR, LT, LV, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
WO 9631792	A1	19961010	WO 1996-EP1265	19960322
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AU 9651475	A1	19961023	AU 1996-51475	19960322
AU 703193	B2	19990318		
AU 9651478	A1	19961023	AU 1996-51478	19960322
AU 704749	B2	19990506		
EP 819258	A1	19980121	EP 1996-908116	19960322
EP 819258	B1	20010912		
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EP 820601	B1	19991222		
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CN 1180415	A	19980429	CN 1996-192990	19960322
CN 1180416	A	19980429	CN 1996-193004	19960322

BR 9604817	A	19980609	BR 1996-4817	19960322	
BR 9604842	A	19980616	BR 1996-4842	19960322	
JP 11502894	T2	19990309	JP 1996-529925	19960322	
JP 11502949	T2	19990309	JP 1996-529931	19960322	
ES 2142574	T3	20000416	ES 1996-908111	19960322	
EP 1043605	A1	20001011	EP 2000-110269	19960322	
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DE 29624309	U1	20020207	DE 1996-29624309	19960322	
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ZA 9602655	A	19961221	ZA 1996-2655	19960403	
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WO 9636890	A1	19961121	WO 1996-EP1888	19960507	
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EP 826158	A1	19980116	EP 1996-919684	19960507	
EP 826158	B1	19990915			
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CN 1186550	A	19980701	CN 1996-194388	19960507	
JP 11505564	T2	19990521	JP 1996-534513	19960507	
BR 9608824	A	19990615	BR 1996-8824	19960507	
AT 184708	E	19991015	AT 1996-919684	19960507	
ZA 9603937	A	19970106	ZA 1996-3937	19960517	
US 5849811	A	19981215	US 1996-682452	19960717	
US 5849811	B1	20001114			
US 5776999	B1	20001121	US 1996-682496	19960717	
US 5789461	B1	20001121	US 1996-683491	19960718	
CA 2238345	AA	19970619	CA 1996-2238345	19961202	
WO 9721497	A1	19970619	WO 1996-EP5326	19961202	
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RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9711399	A1	19970703	AU 1997-11399	19961202	
AU 709598	B2	19990902			
EP 865326	A1	19980923	EP 1996-942292	19961202	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2000503044	T2	20000314	JP 1997-521673	19961202	
ZA 9610289	A	19970609	ZA 1996-10289	19961206	
WO 9722019	A1	19970619	WO 1996-IB1368	19961206	
W: AL, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9676373	A1	19970703	AU 1996-76373	19961206	
EP 865615	A1	19980923	EP 1996-939249	19961206	
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NO 9704585	A	19971118	NO 1997-4584		19971003
US 6043328	A	20000328	US 1997-952416		19971117
AU 9935828	A1	19990916	AU 1999-35828		19990622
PRIORITY APPLN. INFO.:			US 1994-301166	B2	19940906
			EP 1995-810221	A	19950404
			CH 1995-1496	A	19950519
			CH 1995-1476	A	19950518
			US 1995-569816	A	19951208
			AU 1996-51478	A3	19960322
			EP 1996-908116	A3	19960322
			WO 1996-EP1255	W	19960322
			WO 1996-EP1265	W	19960322
			WO 1996-EP1888	W	19960507
			EP 1996-810643	A	19960930
			US 1996-27736P	P	19961003
			WO 1996-EP5326	W	19961202
			WO 1996-IB1368	W	19961206

AB An ophthalmic lens having high oxygen permeability and ion or water permeability suited for extended-wear at least one day comprises a copolymer of a oxyperm macromer and an ionoperm monomer . Thus, 100 g poly(dimethylsiloxane) dialkanol was reacted in sequence with 21.2 g IPDI, 610 g poly(ethylene glycol), 10.4 g isocyanate methacrylate to give a macromer, 180 g of which was polymd. with 3-methacryloxypropyltris (trimethylsiloxy)silane 15 g, ethylene glycol dimethacrylate 1 g, and 2-hydroxyethyl methacrylate 4 g in a polypropylene mold to form a contact lens, showing Hydrodell water permeability coeff. 0.71x10-6 cm2/s and moving of the lens on the eye.

IT **208589-57-5P**
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(extended wear ophthalmic lens contg. oxyperm macromer/ionoperm monomer copolymer)

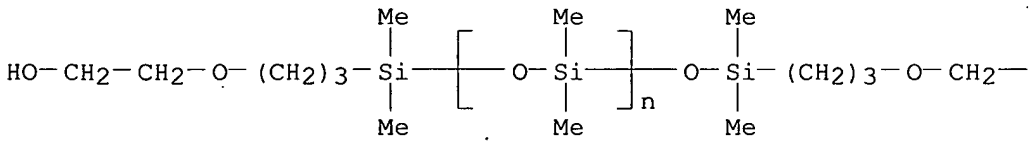
RN 208589-57-5 HCAPLUS

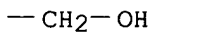
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide, Fomblin Z-DOL, .alpha.-[[3-(2-hydroxyethoxy)propyl]dimethylsilyl]-.omega.-[[[3-(2-hydroxyethoxy)propyl]dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-isocyanatoethyl 2-methyl-2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 156327-07-0
CMF (C2 H6 O Si)n C14 H34 O5 Si2
CCI PMS

PAGE 1-A





CM 2

CRN 107852-51-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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CRN 30674-80-7
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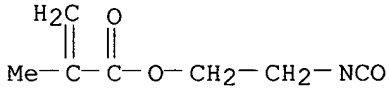

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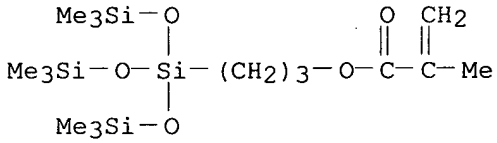

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CRN 13052-11-4
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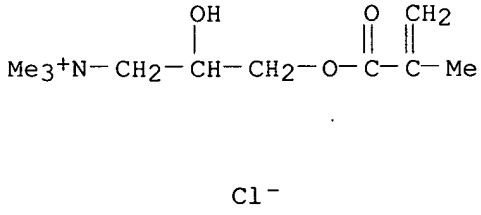

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CRN 4098-71-9
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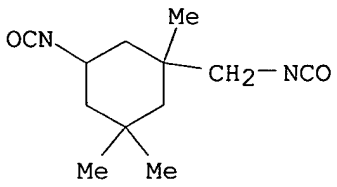

CM 7

CRN 2680-03-7
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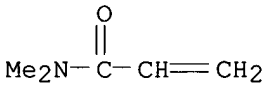


=> d ibib abs hitstr 3

L13 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:361027 HCAPLUS
DOCUMENT NUMBER: 129:55279
TITLE: Hydrophilic, antisoiling, and biocompatible resins and medical materials containing them
INVENTOR(S): Koinuma, Yasuyoshi; Inomata, Kiyoshi; Nakabayashi, Nobuo; Ishihara, Kazuhiko
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan; Nakabayashi, Norio; Ishihara, Kazuhiko; Foundation for Scientific Technology Promotion
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10152533	A2	19980609	JP 1996-312102	19961122

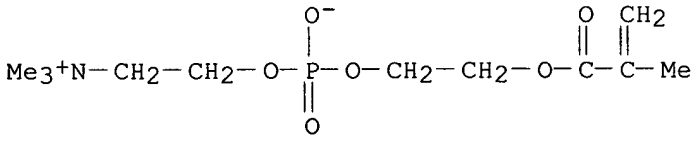
AB The resins having excellent mech. strength are obtained by polymg. 1-99% polymers having (meth)acrylate ester units CH2CR1CO2(CH2CHR2O)nP(O)(O-)OCH2CH2N+Me3 (R1, R2 = H, Me; n = 1-10) and 1-99% room-temp.-liq. polymerizable compds. Thus, 2-methacryloyloxyethyl 2-(trimethylammonio)ethyl phosphate was polymd. in EtOH in the presence of AIBN to give 92% polymer, 5 g of which was further polymd. with 10 g Me methacrylate at 60.degree. for 20 h in EtOH in the presence of AIBN, pptd. in (Me2CH)2O, filtered, dried, dissolved in EtOH, and cast on a hot plate to give a sheet showing contact angle 36 degree initially and 35 after rubbing by wrapping paper with particle size 3 .mu.m for 10 times, albumin adsorption 2.7 .mu.g/cm2 initially and 2.9 after the rubbing, and good antithrombogenic property.

IT **208663-43-8P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phosphorylcholine-contg. (meth)acrylate polymers with good antisoiling property and biocompatibility)

RN 208663-43-8 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,3-bis(isocyanatomethyl)benzene, 1,4-butanediol and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 67881-98-5
CMF C11 H22 N O6 P



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CRN 3634-83-1
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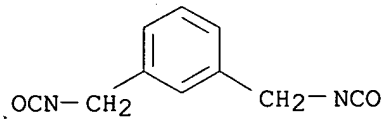
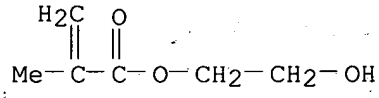


CM 3

CRN 868-77-9
CMF C6 H10 O3



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CRN 110-63-4
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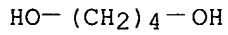

=> d ibib abs hitstr 4

L13 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:602699 HCAPLUS
DOCUMENT NUMBER: 127:263215
TITLE: Polyurethanes containing phospholipid analogs and their manufacture
INVENTOR(S): Sugiyama, Kazuo; Fukuchi, Mikio; Akashi, Mitsuru; Kishida, Akio; Kadoma, Yoshihito
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09235342	A2	19970909	JP 1996-43241	19960229

AB The polyurethanes, useful for medical goods, comprise repeating units of (CONHZNHCO2QCH2O)n(CONHZNHCO2R)m [Q = CHCH2S[CH2C(Me)(CO2Me)]p[CH2C(Me)[CO2CH2CH2OP(O)(O-)OCH2CH2N+Me3]]q; Z = phenylene substituted by 0-4 C1-4 alkyl groups, linear or branched (un)satd. C1-12 alkylene-contg. alkylenediphenyl; R = (AO)u; A = C2-4 alkylene; u = 10-100; m = 0-0.99; n = 0.01-1; m + n = 1; p = 0-0.99; q = 0.01-1; p + q = 1]. Thus, polymn. of 2-methacryloyloxyethyl phosphorylcholine 5, MMA 6.78, and 1-thioglycerol 0.09 g in the presence of AIBN gave a macromer (no.-av. mol. wt. 22,000), which was reacted with 4,4'-diphenylmethane diisocyanate and polyethylene glycol to give a polymer.

IT **196314-43-9P 196314-46-2P 196314-50-8P**
196314-52-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethanes contg. phospholipid analogs and their manuf.)

RN 196314-43-9 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, telomer with 3-mercapto-1,2-propanediol and methyl 2-methyl-2-propenoate, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 1,1'-methylenebis[4-isocyanatobenzene], block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3
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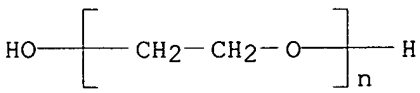
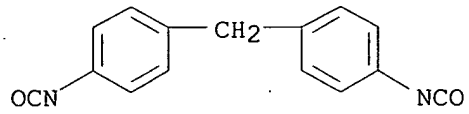
CCI PMS



CM 2

CRN 101-68-8

CMF C15 H10 N2 O2



CM 3

CRN 196314-38-2
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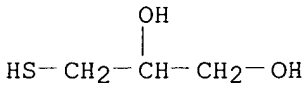
CM 4

CRN 96-27-5
CMF C3 H8 O2 S



CM 5

CRN 67882-00-2
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CM 6

CRN 67881-98-5
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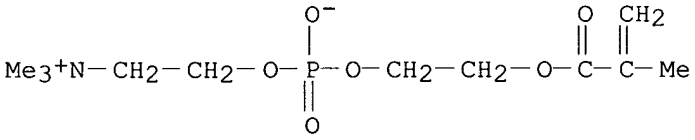
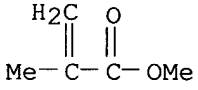


CM 7

CRN 80-62-6
CMF C5 H8 O2

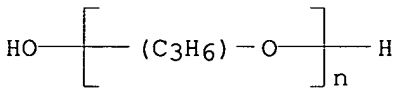


RN 196314-46-2 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-

tetramethyl-9-oxo-, inner salt, 4-oxide, telomer with 3-mercapto-1,2-propanediol and methyl 2-methyl-2-propenoate, polymer with .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 1,1'-methylenebis[4-isocyanatobenzene], block, graft (9CI) (CA INDEX NAME)

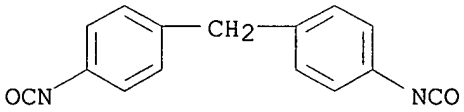
CM 1

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID



CM 2

CRN 101-68-8
CMF C15 H10 N2 O2

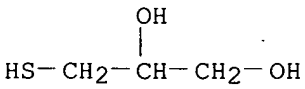


CM 3

CRN 196314-38-2
CMF (C11 H22 N O6 P . C5 H8 O2)x . C3 H8 O2 S

CM 4

CRN 96-27-5
CMF C3 H8 O2 S

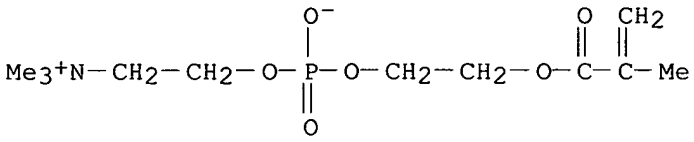


CM 5

CRN 67882-00-2
CMF (C11 H22 N O6 P . C5 H8 O2)x
CCI PMS

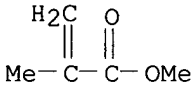
CM 6

CRN 67881-98-5
CMF C11 H22 N O6 P



CM 7

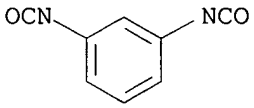
CRN 80-62-6
CMF C5 H8 O2



RN 196314-50-8 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, telomer with 3-mercapto-1,2-propanediol and methyl 2-methyl-2-propenoate, polymer with 1,3-diisocyanatomethylbenzene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), block, graft (9CI) (CA INDEX NAME)

CM 1

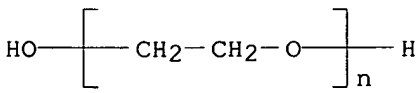
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1—Me

CM 2

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS

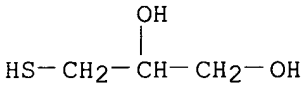


CM 3

CRN 196314-38-2
CMF (C11 H22 N O6 P . C5 H8 O2)x . C3 H8 O2 S

CM 4

CRN 96-27-5
CMF C3 H8 O2 S

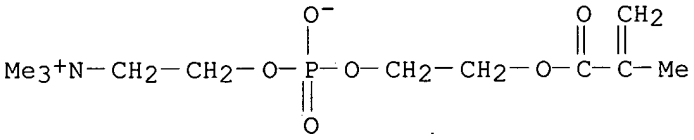


CM 5

CRN 67882-00-2
CMF (C11 H22 N O6 P . C5 H8 O2)x
CCI PMS

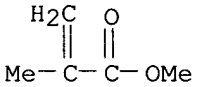
CM 6

CRN 67881-98-5
CMF C11 H22 N O6 P



CM 7

CRN 80-62-6
CMF C5 H8 O2

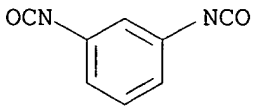


RN 196314-52-0 HCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, telomer with 3-mercapto-1,2-propanediol and methyl 2-methyl-2-propenoate, polymer with 1,3-diisocyanatomethylbenzene and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26471-62-5
CMF C9 H6 N2 O2

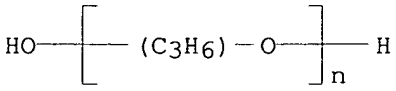
CCI IDS
CDES 8:ID



D1—Me

CM 2

CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS
CDES 8:ID

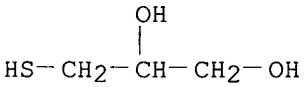


CM 3

CRN 196314-38-2
CMF (C11 H22 N O6 P . C5 H8 O2)x . C3 H8 O2 S

CM 4

CRN 96-27-5
CMF C3 H8 O2 S

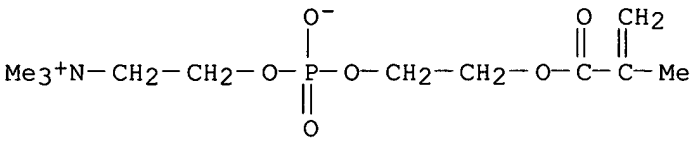


CM 5

CRN 67882-00-2
CMF (C11 H22 N O6 P . C5 H8 O2)x
CCI PMS

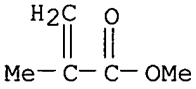
CM 6

CRN 67881-98-5
CMF C11 H22 N O6 P



CM 7

CRN 80-62-6
CMF C5 H8 O2



=> d ibib abs hitstr 5

L13 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:90732 HCAPLUS
DOCUMENT NUMBER: 120:90732
TITLE: Microcapsules having excellent mechanical strength and manufacture thereof
INVENTOR(S): Inaba, Yoshihiro; Mikami, Takeshi
PATENT ASSIGNEE(S): Fuji Xerox Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05061237	A2	19930312	JP 1992-20718	19920110
US 5336581	A	19940809	US 1992-887049	19920526
PRIORITY APPLN. INFO.:			JP 1991-153829	19910530
			JP 1992-20718	19920110

AB Microcapsules are manufd. via the steps of effecting reaction of a 1st monomer with a 2nd monomer (at least either of which contains azo group capable of initiating polymn.) using internal in-situ polymn. to form capsule shells contg. the azo and a polymer structure selected from polyureas, polyurethanes, polyamides, polyesters, and epoxy resins, and effecting vinyl polymn. initiated by decompn. of the azo group to attach a vinyl monomer to the shells (i.e., forming a block and/or a graft copolymer). This manuf. can be used for prepg. microcapsule toners.

IT **152585-51-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, microcapsule from)

RN 152585-51-8 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether, polymer with N-(2-aminoethyl)-1,2-ethanediamine, 2,2'-azobis[3-hydroxy-2-methylpropanenitrile], 1,3-diisocyanatomethylbenzene, methyl 2-methyl-2-propenoate, Sumidur L and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

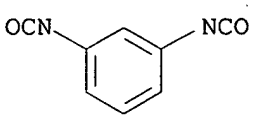
CM 1

CRN 97709-04-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

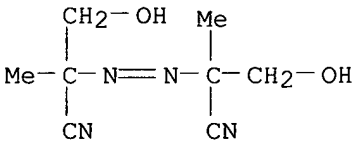
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1—Me

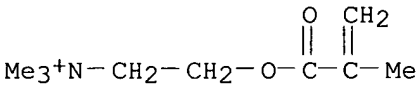
CM 3

CRN 19706-80-0
CMF C8 H12 N4 O2



CM 4

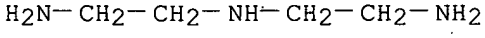
CRN 5039-78-1
CMF C9 H18 N O2 . Cl



● Cl^-

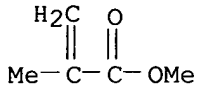
CM 5

CRN 111-40-0
CMF C4 H13 N3



CM 6

CRN 80-62-6
CMF C5 H8 O2



CM 7

CRN 9004-65-3
CMF C3 H8 O2 . x C H4 O . x Unspecified
CDES 8:GD

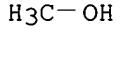
CM 8

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

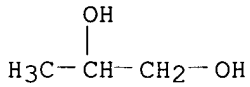
CM 9

CRN 67-56-1
CMF C H4 O



CM 10

CRN 57-55-6
CMF C3 H8 O2



indexing for cite #5

LEVY 09/626,026

=> d ind 5

L12 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2002 ACS
IC ICM G03G009-08
ICS G03G009-087
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST capsule toner vinyl polymer **coating**; amino glycidyl reaction capsule toner
IT Electrophotographic developers
(toners, core-shell capsule toner)
IT **172722-03-1P**, Diethylenetriamine-2-ethylhexyl methacrylate-glycidyl methacrylate-lauryl methacrylate-methacryloxyethyltrimethylammonium chloride-methyl methacrylate-Metolose 65SH50-Sumidur L graft copolymer 172722-04-2P, 4,4'-Azobis[4-cyanovaleric acid]-diethylenetriamine-Epiol A-2-ethylhexyl methacrylate-lauryl methacrylate-Metolose 65SH50-Sumidur L-trifluoroethyl methacrylate graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(core-shell capsule toner)

Searched by Susan Hanley 305-4053

=> d ibib abs hitstr 6

L13 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:179988 HCAPLUS
DOCUMENT NUMBER: 118:179988
TITLE: Preparation of toners having polymer with desired anion on their surface
INVENTOR(S): Inaba, Yoshihiro; Kubo, Tsutomu; Takashima, Koichi
PATENT ASSIGNEE(S): Fuji Xerox Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04241361	A2	19920828	JP 1991-78657	19910114
US 5385802	A	19950131	US 1991-769250	19911001
PRIORITY APPLN. INFO.:			JP 1990-268317	19901008
			JP 1991-78657	19910114

AB The title toners are prepd. in such a manner that a polymer, which is present on the surface of the toners, contg., as a monomer unit, a vinyl monomer having a quaternary ammonium group bearing p-toluenesulfonic acid ion and/or Me sulfate ion as its anionic component is ion-exchanged to convert the ion into other anion. The toners contg. a polymer having desired anions on their surfaces can be prepd. simply, and the toners show good charge stability under varied environmental conditions. Thus, EPT-1000 (magnetic powder) and binder resins were microencapsulated by using Sumidur L (isocyanate) and Metolose 65SH50. The obtained microcapsules were reacted with ethylene glycol dimethacrylate and subsequently with methacryloyloxyethyltrimethylammonium p-toluenesulfonate and Me methacrylate to form a graft copolymer on the surface and then ion-exchanged with Na 4-hydroxy-1-naphthalenesulfonate to give a capsule toner.

IT **146938-42-3 146938-42-3D**, deriv. **146938-43-4**
146938-43-4D, reaction product with Fast Red A
RL: USES (Uses)
(coloring agent and binder microencapsulated with, for electrophotog. toner)

RN 146938-42-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate, Sumidur L and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium salt with 4-methylbenzenesulfonic acid (1:1), graft (9CI) (CA INDEX NAME)

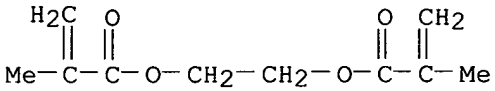
CM 1

CRN 97709-04-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

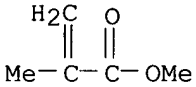
CM 2

CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 80-62-6
CMF C5 H8 O2

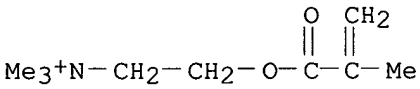


CM 4

CRN 40820-77-7
CMF C9 H18 N O2 . C7 H7 O3 S

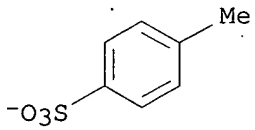
CM 5

CRN 33611-56-2
CMF C9 H18 N O2



CM 6

CRN 16722-51-3
CMF C7 H7 O3 S



CM 7

CRN 9004-65-3
CMF C3 H8 O2 . x C H4 O . x Unspecified
CDES 8:GD

CM 8

CRN 9004-34-6

CMF Unspecified
CCI PMS, MAN

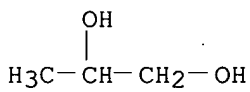
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 9

CRN 67-56-1
CMF C H4 O

CM 10

CRN 57-55-6
CMF C3 H8 O2



RN 146938-42-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate, Sumidur L and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium salt with 4-methylbenzenesulfonic acid (1:1), graft (9CI) (CA INDEX NAME)

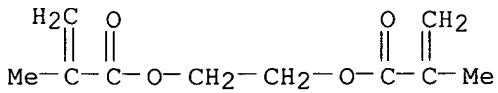
CM 1

CRN 97709-04-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

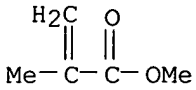
CM 2

CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 80-62-6
CMF C5 H8 O2

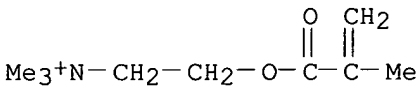


CM 4

CRN 40820-77-7
CMF C9 H18 N O2 . C7 H7 O3 S

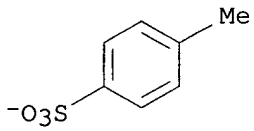
CM 5

CRN 33611-56-2
CMF C9 H18 N O2



CM 6

CRN 16722-51-3
CMF C7 H7 O3 S



CM 7

CRN 9004-65-3
CMF C3 H8 O2 . x C H4 O . x Unspecified
CDES 8:GD

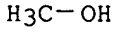
CM 8

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

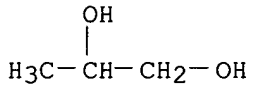
CM 9

CRN 67-56-1
CMF C H4 O



CM 10

CRN 57-55-6
CMF C3 H8 O2



RN 146938-43-4 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether, polymer with ar,ar-diisocyanato-ar-methylbenzenamine, 1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate, 2,2',2''-[1,2,3-propanetriyltris(oxymethylene)]tris[oxirane], Sumidur L and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium methyl sulfate, graft (9CI) (CA INDEX NAME)

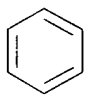
CM 1

CRN 97709-04-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 30677-40-8
CMF C9 H7 N3 O2
CCI IDS
CDES 8:ID,RING



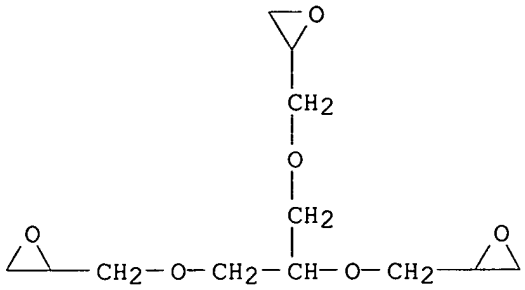
D1—Me

D1—NH_2

2 (D1—NCO)

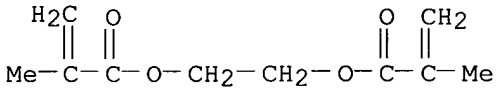
CM 3

CRN 13236-02-7
CMF C12 H20 O6



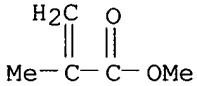
CM 4

CRN 97-90-5
CMF C10 H14 O4



CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 9004-65-3
CMF C3 H8 O2 . x C H4 O . x Unspecified
CDES 8:GD

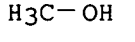
CM 7

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

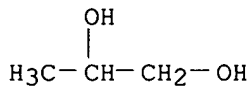
CM 8

CRN 67-56-1
CMF C H4 O



CM 9

CRN 57-55-6
CMF C3 H8 O2

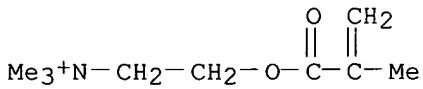


CM 10

CRN 6891-44-7
CMF C9 H18 N O2 . C H3 O4 S

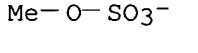
CM 11

CRN 33611-56-2
CMF C9 H18 N O2



CM 12

CRN 21228-90-0
CMF C H3 O4 S



RN 146938-43-4 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether, polymer with ar,ar-diisocyanato-ar-methylbenzenamine, 1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate, 2,2',2''-[1,2,3-propanetriyltris(oxymethylene)]tris[oxirane], Sumidur L and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium methyl sulfate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 97709-04-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 30677-40-8
CMF C9 H7 N3 O2
CCI IDS
CDES 8:ID,RING

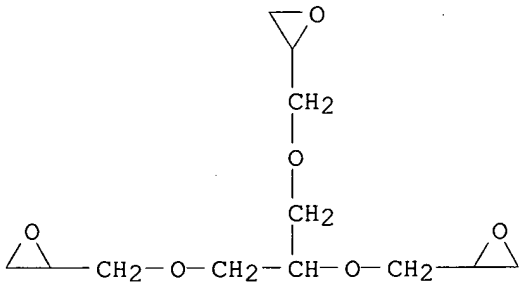
D1—Me

D1—NH_2

2 (D1—NCO)

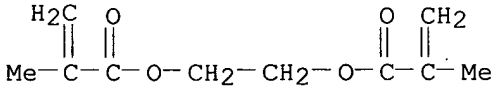
CM 3

CRN 13236-02-7
CMF C12 H20 O6



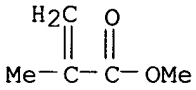
CM 4

CRN 97-90-5
CMF C10 H14 O4



CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 9004-65-3
CMF C3 H8 O2 . x C H4 O . x Unspecified
CDES 8:GD

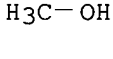
CM 7

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

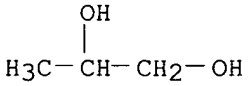
CM 8

CRN 67-56-1
CMF C H4 O



CM 9

CRN 57-55-6
CMF C3 H8 O2

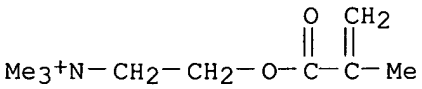


CM 10

CRN 6891-44-7
CMF C9 H18 N O2 . C H3 O4 S

CM 11

CRN 33611-56-2
CMF C9 H18 N O2



CM 12

CRN 21228-90-0
CMF C H3 O4 S

Me— O— SO_3^-

=> d ibib abs hitstr 7

L13 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:107062 HCAPLUS
DOCUMENT NUMBER: 116:107062
TITLE: Hydrophilic polyurethanes containing double bonds
INVENTOR(S): Kobayashi, Tatsuhiko; Uchida, Shinji; Ota, Takayuki
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03250014	A2	19911107	JP 1990-48020	19900228
JP 2985210	B2	19991129		

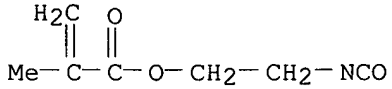
AB The title polymers having good soly. and dispersibility in org. solvents are prepd. by copolymn. of hydrophilic vinyl monomers with double bond-contg. polyurethane obtained by reacting 0.05-1.4 mol vinyl monomer contg. 1 OH or NCO group with 1 mol polyurethane (no.-av. mol. wt. 2000-100,000) having active H group or NCO group at both ends. Polypropylene glycol (mol. wt. 2020) 1010, IPDI 88.8, and dibutyltin dioctoate 0.22 part were heated at 80.degree. for about 5 h to obtain a OH-terminated polyurethane (no.-av. mol. wt. 10,990) which was then heated with 17.0 parts 2-methacryloyloxyethyl isocyanate at 80.degree. for about 8 h to obtain polyurethane (I) contg. double bonds in the end groups with no.-av. mol. wt. 11,160. I 94, polyethylene glycol monomethacrylate (mol. wt. 440) 56, MEK 350, and AIBN 3 parts were heated at 70.degree. for about 8 h to give a 30%-solids hydrophilic polyurethane soln.

IT **139385-60-7P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. of, hydrophilic, sol. and dispersible in org. solvents)

RN 139385-60-7 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 2-isocyanatoethyl 2-methyl-2-propenoate and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

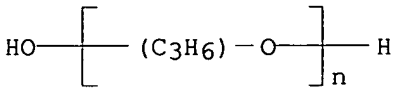
CRN 30674-80-7
CMF C7 H9 N O3



CM 2

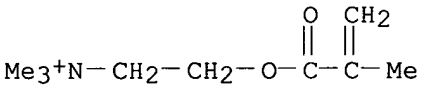
CRN 25322-69-4
CMF (C3 H6 O)n H2 O
CCI IDS, PMS

CDES 8:ID



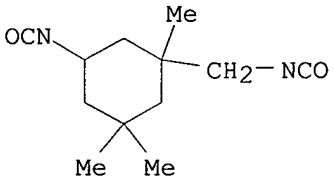
CM 3

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



CM 4

CRN 4098-71-9
CMF C12 H18 N2 O2



Indexing for cite #7

LEVY 09/626,026

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L12 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2002 ACS
IC ICM C08J009-28
ICS C08G018-83; C08J009-28
ICI C08L075-04
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 40, 43
ST porous sheet polyurethane **coating**; emulsion polyurethane **coating**; moisture permeability polyurethane **coating**; nylon fabric porous polyurethane **coating**; hydrophobic hydrophilic polyurethane blend **coating**; PTMG polyurethane **coating**; ethylene glycol polyurethane **coating**; acrylate polyurethane **coating**; glycerol methacrylate polyurethane **coating**; hydroxyethyl acrylate polyurethane **coating**
IT Polyamide fibers, uses and miscellaneous
RL: USES (Uses)
(fabrics, hydrophobic-hydrophilic polyurethane blend-coated, moisture-permeable)
IT Textiles
(cotton, hydrophilic-hydrophobic polyurethane blend-coated, moisture-permeable)
IT **Coating** materials
(emulsion, moisture-permeable, water-in-oil, hydrophilic-hydrophobic polyurethane blend, for porous substrates)
IT Paper
(release, hydrophilic-hydrophobic polyurethane blend-coated, moisture-permeable)
IT 131231-73-7P 131231-74-8P 131247-13-7P 131247-14-8P
131247-15-9P 131321-21-6P
RL: PREP (Preparation)
(prepn. of hydrophilic, for blending with hydrophobic polyurethanes in water-in-oil emulsions, for moisture-permeable **coatings** on porous substrates)
IT 61245-23-6P 94189-49-8P 131212-57-2P
RL: PREP (Preparation)
(prepn. of hydrophobic, for blending with hydrophilic polyurethanes in water-in-oil emulsions, for moisture-permeable **coatings** for porous substrates)

Searched by Susan Hanley 305-4053

=> d ibib abs 1-24

L46 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:107416 HCAPLUS
DOCUMENT NUMBER: 136:167821
TITLE: Polyurethane **film**-forming dispersions in alcohol-water system and their manufacture for use in **antimicrobial** compositions
INVENTOR(S): Scholz, Matthew T.; Kantner, Steven S.; Comstock, Kristen L.; Brown, Christopher J.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010242	A1	20020207	WO 2000-US32962	20001204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-627110 A 20000727
AB The dispersion is stable in an lower alc.-H2O mixt. The dispersion is (a) prepolymer reaction product of (i) .gtoreq.1 oligomeric polyactive H compd., where the compd. is an alkyl, aryl, or aralkyl structure optionally substituted in and/or on the chain by N, O, S and combinations, and where the compd. is insol. in 50:50 (wt%) alc.-H2O mixt., (ii) .gtoreq.1 polyisocyanate, and (iii) .gtoreq.1 polyactive H compd. sol. in the alc.-H2O mixt. selected from compd. contg. an ionic group, a compd. contg. a moiety capable of forming an ionic group, a compd. contg. a polyester, polyether, or polycarbonate group having a C/O ratio .ltoreq.5, and mixts., and (b) .gtoreq.1 polyfunctional chain extender. Thus, an example polymer was formed from Kraton L 2203, Terathane 2000, sodiosulfopolyester diol, Surfynol 102 surfactant, Desmodur I, and ethylenediamine chain extender.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:807734 HCAPLUS
DOCUMENT NUMBER: 133:363129
TITLE: **Antimicrobial** copolymers, their production and their use
INVENTOR(S): Ottersbach, Peter; Sosna, Friedrich
PATENT ASSIGNEE(S): Creavis Gesellschaft fuer Technologie und Innovation m.b.H., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19921903	A1	20001116	DE 1999-19921903	19990512
WO 2000069938	A1	20001123	WO 2000-EP2819	20000330
W: AU, BR, CA, CN, IL, JP, KR, NO, NZ, PL, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1183292	A1	20020306	EP 2000-926779	20000330
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: DE 1999-19921903 A 19990512
WO 2000-EP2819 W 20000330

AB **Antimicrobial** copolymers are based on 2 different aliph. unsatd. monomers having .gtoreq.1 **quaternary ammonium** group; a third aliph. unsatd. monomer may also be incorporated. The copolymn. may be conducted on a substrate to provide an **antimicrobial coating**. In an example, equal amts. of 2-(methacryloyloxy)ethyltrimethylammonium chloride and 3-(methacryloylamino)propyltrimethylammonium chloride were copolymd. to give a product effective against S. aureus and P. aeruginosa.

L46 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:431000 HCAPLUS
DOCUMENT NUMBER: 133:164620
TITLE: Synthesis, characterization and **biocidal** properties of epoxy resins containing **quaternary ammonium** salts
AUTHOR(S): Destais, Nadege; Ades, Dominique; Sauvet, Georges
CORPORATE SOURCE: Laboratoire de Recherches sur les Macromolecules, Villetaneuse, 93430, Fr.
SOURCE: Polymer Bulletin (Berlin) (2000), 44(4), 401-408
CODEN: POBUDR; ISSN: 0170-0839
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Quaternary ammonium** salts (QAS) were covalently-bound to epoxy resins of different DP in two steps: addn. of a N,N-dialkylaminoethanethiol followed by the **quaternization** of the tertiary amine by an alkyl bromide (C8H17Br to C14H29Br). The products were characterized by 1H NMR spectroscopy. The QAS-contg. oligomers (with optional chain extender) were used as polyols to prep. **polyurethane** (PU) **films** by reaction with a triisocyanate (Tolonate HDB). The **films** show a good bactericidal activity against Escherichia coli, which is preserved after 6 mo of immersion in water.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:669262 HCAPLUS
DOCUMENT NUMBER: 130:4791
TITLE: **Biocidal** polyurethane and its antibacterial properties
AUTHOR(S): Wang, Huei-Hsiung; Lin, Meei-Show
CORPORATE SOURCE: Grad. Inst. Text Eng., Feng Chia Univ., Taichung, 40710, Taiwan
SOURCE: J. Polym. Res. (1998), 5(3), 177-186
CODEN: JPOREP; ISSN: 1022-9760

PUBLISHER: Polymer Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The **antimicrobial** finishes on the cotton fabrics has been known and reported recently. Particularly, the reactive-**antimicrobial** finishes are the most attractive. In this study, we synthesized three types of **polyurethane** (PU) polymers; type A (mol. wt. of polytetramethylene glycol (PTMG) is 2000), type B (mol. wt. of PTMG is 1000), and type C (mol. wt. of PTMG is 650). Firstly, the PU prepolymers were prepd. by reacting PTJG with 4,4'-diphenylmethane diisocyanate (MDI), then were extended with diethylenetriamine (DETA) (or DETA/hydrazine mixt.) to form the PU polymer. The polymer was then grafted with epichlorohydrin and further reacted with different amts. of **biocide** (QAS) to form **biocidal** active PU **quaternary ammonium** salts. The **biocidal** properties of the PU **films** were evaluated by the agar plate and the shake flask method. From the exptl. results, it demonstrates that these **films** and finished fabrics exhibit a high **biocidal** activity against Staphylococcus aureus. The **biocidal** activity is found to increase with the amt. of QAS. After rinsing with water, the **biocidal** activity is found to increase with the amt. of QAS. After rinsing with water, the **biocidal** characteristics of these **films** and finished fabrics remain. From IR spectra, PU **films** with covalent bond of QAS show an absorption peak at 2300 cm-1, which corresponds to the presence of silicon in QAS. For the mech. properties, the PU **films** with QAS sustain the mech. properties in spite of the increasing amt. of grafted QAS.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:402515 HCAPLUS
DOCUMENT NUMBER: 129:45351
TITLE: **Antimicrobial** and antithrombogenic materials containing mucopolysaccharide **quaternary ammonium** complexes
INVENTOR(S): Manden, Nodriko; Seko, Masahiro; Yokota, Hideyuki; Arimori, Susumu; Tanaka, Masakazu
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10165493	A2	19980623	JP 1996-330785	19961211

OTHER SOURCE(S): MARPAT 129:45351
AB Title materials, useful for artificial organs and disposable medical goods, comprise (a) lipid-sol. complexes of mucopolysaccharides with trialkoxysilyl-contg. **quaternary ammonium** compds. and (b) org. polymers. Na heparin was treated with 3-(trimethoxysilyl)propyldimethyloctadecylammonium chloride in MeOH-H2O at 4.degree. for 15 h to give a complex. Pellethane (**polyurethane**) **film** contg. 10 phr of the complex showed retarding effect on CaCl2-induced rabbit blood plasma coagulation and in vitro antibacterial activity against Pseudomonas aeruginosa, even after soaking into citric acid-contg. bovine blood plasma.

L46 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:388900 HCAPLUS
DOCUMENT NUMBER: 129:58869
TITLE: Antithrombogenic and antibacterial materials based on mucopolysaccharide **quaternary ammonium** complexes and organic polymers
INVENTOR(S): Yokota, Hideyuki; Seko, Masahiro; Kadota, Noriko; Arimori, So; Tanaka, Masakazu
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10155898	A2	19980616	JP 1996-314643	19961126

OTHER SOURCE(S): MARPAT 129:58869
AB The materials at least contain (1) lipophilized mucopolysaccharides comprising ionic complexes of .gtoreq.1 mucopolysaccharides and **quaternary ammoniums**, (2) inorg. bactericides, and org. polymers. The materials show antibacterial activity against Gram-neg. bacteria which not sufficiently susceptible to ammonium **microbicides**. An aq. soln. of heparin Na (I) was treated with an aq. soln. of benzyldimethylcetylammonium chloride (II) at 4.degree. for 15 to give I-II complex. The complex was mixed with a THF soln. of Pellethane and Zeomic, and the blend was cast on a glass plate to give an antithrombogenic **film**. The **film** inhibited growth of Pseudomonas aeruginosa. A polypropylene hollow fiber for artificial lung was **coated** with a THF suspension of the above blend, and tested for biocompatibility in the femoral artery of a rabbit.

L46 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:77062 HCAPLUS
DOCUMENT NUMBER: 128:103322
TITLE: The synthesis of **biocidal** PU and its antibacterial activity
AUTHOR(S): Wang, Huei-Hsiung; Iun, Dun-Iue
CORPORATE SOURCE: Graduate School Textile Engineering Feng Chia University, Taichung, 40724, Taiwan
SOURCE: Cailiao Kexue (1997), 29(4), 215-226
CODEN: TLKHAJ; ISSN: 0379-6906
PUBLISHER: Chinese Society for Materials Science
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB We synthesized three type of **polyurethane** (PU) polymers; type A (mol. wt. of polytetramethylene glycol (PTMG) is 2000), type B (mol. wt. of PTMG is 1000), type C (mol. wt. of PTMG is 650). The PU prepolymers were prepd. by treating PTMG with MDI then extended with diethylenetriamine (DETA) (or DETA/hydrazine mixt.) to form the PU polymer. The polymer was grafted with epichlorohydrin and further reacted with different amts. of (triethoxysilylpropyl)dimethyloctadecylammonium chloride (QAS) **biocide** to form **biocidal** active PU **quaternary ammonium** salts. The **biocidal** properties of the PU **films** were evaluated by the agar plate and the shake flask method. These **films** and finished fabrics exhibit a high **biocidal** activity against Staphylococcus aureus.

The **biocidal** activity is found to increase with the amt. of QAS. After rinsing with water, the **biocidal** activity of these **films** and finished fabrics still remains the **biocidal** characteristics. From IR spectrum, PU **films** with covalent bond of QAS show an absorption peak at 2300 cm-1, which is corresponding to the presence of silicon in QAS. As for the mech. properties, the PU **films** with QAS sustain the mech. properties in spite of the increasing amt. of grafted QAS.

L46 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:819441 HCAPLUS
DOCUMENT NUMBER: 123:258511
TITLE: **Biocidal** polymers active by contact. IV. **Polyurethanes** based on polysiloxanes with pendant primary alcohols and **quaternary ammonium** groups
AUTHOR(S): Hazziza-Laskar, J.; Helary, G.; Sauvet, G.
CORPORATE SOURCE: Lab. Rech. Macromol., Univ. Paris-XIII, Villetaneuse, 93430, Fr.
SOURCE: J. Appl. Polym. Sci. (1995), 58(1), 77-84
CODEN: JAPNAB; ISSN: 0021-8995
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Functional polysiloxanes bearing both primary alcs. and **quaternary ammonium** salts (QAS) as lateral substituents were prepd. The synthesis involves a cohydrosilylation of allylic derivs. (N,N-dimethylallylamine and allyloxytrimethylsilane) with various poly(di-Me siloxane-H Me siloxanes). During the **quaternization** of the tertiary amino groups the alc. functions are also deprotected. The hydroxyl groups allow the polysiloxane to be incorporated in **polyurethane films** whereas the QAS impart **biocidal** properties to the **coating**.in the case of a QAS bearing a hexadecyl substituent, a very high activity was found against Escherichia coli without any observable diffusion. The mode of action by contact between the solid polymer and the microorganisms was confirmed by the excellent durability of the **biocidal** power after 1 mo of immersion in water.

L46 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:331080 HCAPLUS
DOCUMENT NUMBER: 120:331080
TITLE: Modification of central venous catheter polymers to prevent in vitro **microbial** colonization
AUTHOR(S): Tebbs, S. E.; Elliott, T. S. J.
CORPORATE SOURCE: Dep. Clin. Microbiol., Queen Elizabeth Hosp., Birmingham, B15 2TH, UK
SOURCE: Eur. J. Clin. Microbiol. Infect. Dis. (1994), 13(2), 111-17
CODEN: EJCDEU; ISSN: 0934-9723
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The efficacy of an **antimicrobial** catheter for the prevention of bacterial colonization was investigated. The catheter was hydrophilic **coated** (Hydrocath) and impregnated with the **quaternary ammonium antimicrobial** agent, benzalkonium chloride (BZC). **Microbial** colonization of this central venous catheter was compared to that of **polyurethane** catheters with or without a hydrophilic **coating**. Adherence of five strains of Staphylococcus epidermidis to the three catheter types was detd. with a **microbial** colonization model. Adherence of three strains of

Staphylococcus epidermidis to Hydrocath catheters was significantly reduced in comparison to **polyurethane** catheters. BZC-impregnated Hydrocath catheters prevented bacterial colonization of both the internal and external catheter surfaces. These results were confirmed by SEM. The findings demonstrate that hydrophilic-**coated** Hydrocath catheters can inhibit bacterial adherence in vitro. Bacterial colonization was further restricted by the addn. of BZC to these **coated** catheters.

L46 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:136080 HCAPLUS
DOCUMENT NUMBER: 120:136080
TITLE: Functional polysiloxanes and their preparation and use in the manufacture of resins with permanent **biocidal** properties.
INVENTOR(S): Sauvet, Georges; Helary, Gerard; Hazziza-Laskan, Judith
PATENT ASSIGNEE(S): Groupement d'Interet Public Therapeutiques Substitutives, Fr.
SOURCE: Fr. Demande, 17 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2686610	A1	19930730	FR 1992-831	19920127
FR 2686610	B1	19950616		

AB Polysiloxanes are prepd. with **quaternary ammonium** side chains and reactive side groups that permit the manuf. of resins, e.g., polyesters or **polyurethanes**, with permanent **biocidal** properties. Thus, polymn. of octamethylcyclotetrasiloxane with tetramethylcyclotetrasiloxane in the presence of tetramethyldisiloxane, reaction of the product with N,N-dimethylallylamine and allyloxytrimethylsilane, and reaction of the latter product with 1-bromohexadecane in EtOH gave a product with OH and **quaternary ammonium** side groups. **Polyurethane films** prepd. from this product and Tolonate HDB exhibited good resistance to incubation of Escherichia coli.

L46 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:56702 HCAPLUS
DOCUMENT NUMBER: 120:56702
TITLE: **Biocidal** polymers active by contact. II. Biological evaluation of **polyurethane coatings** with pendant **quaternary ammonium** salts
AUTHOR(S): Nurdin, N.; Helary, G.; Sauvet, G.
CORPORATE SOURCE: Lab. Recher. Macromol., Univ. Paris-XIII, Villetaneuse, 93430, Fr.
SOURCE: J. Appl. Polym. Sci. (1993), 50(4), 663-70
CODEN: JAPNAB; ISSN: 0021-8995
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Films** of **polyurethanes** were prepd. by reaction of hydroxytelechelic polybutadienes carrying covalently bound **quaternary ammonium** salts with an aliph. triisocyanate. These **coatings** exhibited high **biocidal** activity

against Gram-pos. and Gram-neg. bacteria, yeasts, and molds. Many parameters controlled the bioactivity such as the time of contact between **films** and bacteria, the [NCO]/[OH] ratio used to prep. the cured **polyurethane**, the concn. of **quaternary ammonium** salts in the **coating**, and the length of the alkyl chain from C8 to C16 linked to the **quaternary** N atom. A secondary phenomena of diffusion only obsd. with the shorter alkyl chains (C8 and C10) was due to synthesis residues. After these water-sol. impurities were eliminated, the **biocidal** activity remained excellent: then it was due only to a contact polymer bacteria.

L46 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:605498 HCAPLUS
DOCUMENT NUMBER: 119:205498
TITLE: **Biocidal** polymers active by contact. III. Aging of **biocidal** polyurethane **coatings** in water
AUTHOR(S): Nurdin, N.; Helary, G.; Sauvet, G.
CORPORATE SOURCE: Lab. Recher. Macromol., Univ. Paris-XIII, Villetaneuse, 93430, Fr.
SOURCE: J. Appl. Polym. Sci. (1993), 50(4), 671-8
CODEN: JAPNAB; ISSN: 0021-8995
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Polyurethane coatings** prepd. from hydroxytelechelic polybutadiene with pendant **quaternary ammonium** salts (QAS) were able to kill microorganisms only by contact. In order to det. the time of protection against microorganisms, these **biocidal** polymers were submitted to various aging conditions. The activity remained const. after exposure to a very high no. of bacteria (Escherichia coli). Nevertheless immersion in water caused a slow decrease of activity with time whatever QAS examd. The phenomenon was analyzed in 2 stages. The first one, short (5-10 days) and limited, was due to the diffusion of a water-sol. synthesis residue. At the end of this period, the samples were still active and the activity was only due to a contact polymer-bacteria. The second stage was much lower and was accompanied by a transformation of QAS in amine. This was attributed to an equil. between QAS, amine, and alkyl bromide slowly shifted toward the formation of amine because of a weak soly. of alkyl bromide in water. Increasing the lipophilicity and bulkiness of the QAS substituents improved the durability of the **biocidal** activity. Some samples still exhibited a good activity after >1 yr of aging in harsh conditions.

L46 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:175856 HCAPLUS
DOCUMENT NUMBER: 118:175856
TITLE: Process for **antimicrobial** treatment of polyurethane medical devices
INVENTOR(S): Laufer, Jay K.
PATENT ASSIGNEE(S): BOC Health Care, Inc., USA
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 520160	A1	19921230	EP 1992-107452	19920430

R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, PT, SE
CA 2068168 AA 19921229 CA 1992-2068168 19920511
PRIORITY APPLN. INFO.: US 1991-722784 19910628
OTHER SOURCE(S): MARPAT 118:175856
AB A method for impregnating a preformed **polyurethane** medical device with an **antimicrobial quaternary ammonium** compd. (Markush structure is given) comprises the step of contacting the device with a soln. cong. said compd. in a chlorinated or fluorinated hydrocarbon solvent, and then removing the solvent. Pellethane 2363 tubing were immersed in 3% benzalkonium chloride for 1 min, then removed and dried at 65.degree. for 20 min. The impregnated tubes produced an inhibition zone of 17.0 mm diam. when placed in an agar dish which was inoculated with staphylococcus aureus.

L46 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:209707 HCAPLUS
DOCUMENT NUMBER: 116:209707
TITLE: Polymers of dihydroxy **quaternary ammonium** salts as algicidal and **microbicidal coatings**
INVENTOR(S): Stovicek, Pavel
PATENT ASSIGNEE(S): Can.
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5084096	A	19920128	US 1990-505252	19900405
CA 1316623	A1	19930420	CA 1989-595836	19890406

PRIORITY APPLN. INFO.: CA 1989-595836 19890406
AB The **quaternary** NH4 compds. [4-HOC6H4CY[(CH2)nNR1R2R3]C6H4OH-4]+ X- and/or [R1R2NR3CH2CH(OH)(CH2)nOH]+ X- [R1-R3 = (un)substituted alkyl or hydroxyalkyl; Y = H, (un)substituted alkyl; X = anion] are prepd. as **microbicides** and algicides. Repeating side chains of these compds. are directly bonded to the backbone of polyether, polyesters, polycarbonate, **polyurethane**, or alkyd resins to give **microbicidal** and algicidal **coatings**, usable for boat hulls, fishing nets, walls, roofs, etc. A mixt. of hexyl alc. 1, tetradecyl chloride 0.435, 1-diethanolaminobutyl-3,3'-bis(4,4'-hydroxyphenyl)-HCl 0.435 and Al turnings 0.145 mol was refluxed to give 1-tetradecyl(diethanolaminobutyl)3,3-bis(hydroxyphenyl)ammonium chloride. This was reacted with epichlorohydrin to produce a polyether, which was dissolved in BuOH and treated with Versamid 115 .times. 70 hardener to give a **coating** which controlled Staphylococcus aureus, S. faecalis, Aerobacter aerogenes, Cyanophyta, Oscillatoria, etc.

L46 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:201164 HCAPLUS
DOCUMENT NUMBER: 116:201164
TITLE: Antithrombogenic and **antimicrobial coating** compositions for medical uses
INVENTOR(S): Whitbourne, Richard James; Mangan, Margaret Anne
PATENT ASSIGNEE(S): Sterilization Technical Services, Inc., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9200747	A1	19920123	WO 1991-US2868	19910502
W: CA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2087102	AA	19920113	CA 1991-2087102	19910502
EP 626854	A1	19941207	EP 1991-909862	19910502
EP 626854	B1	19980715		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 168269	E	19980815	AT 1991-909862	19910502
ES 2120961	T3	19981116	ES 1991-909862	19910502
PRIORITY APPLN. INFO.:			US 1990-551924	19900712
			US 1991-662452	19910228
			WO 1991-US2868	19910502

AB Antithrombogenic agents or antibiotic agents are complexed with ionic surfactants (e.g. **quaternary ammonium** compds.) and formulated with water-insol. polymers to provide **coating** materials for artificial blood vessels, catheters, etc. The invention **coating** compn. provides **antimicrobial** and/or antithrombogenic surfaces for a long time. Thus, a **polyurethane** tube was **coated** with a soln. contg. PVP 0.006, isopropanol 1.0, nitrocellulose 1.6, Et acetate 1.2, rosin ester 0.5, Bu acetate 4.8, dimethylacetamide 1.5, and Et 3-ethoxypropionate 6.1 g, then overcoated with a soln. contg. isopropanol 9.85, dimethylacetamide 1.00, and heparin-benzalkonium chloride (I) 0.15 g. The tube was dipped in a Gentian violet dye soln. and rinsed in hot running water; the tube retained the dye stain much longer than the control tube **coated** with I in isopropanol, without undercoat of nitrocellulose.

L46 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:614967 HCAPLUS
DOCUMENT NUMBER: 115:214967
TITLE: Antithrombogenic and **antimicrobial** **coating** compositions for medical goods
INVENTOR(S): Whitbourne, Richard James; Mangan, Margaret Anne
PATENT ASSIGNEE(S): Sterilization Technical Services, Inc., USA
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 426486	A2	19910508	EP 1990-312021	19901102
EP 426486	A3	19921125		
EP 426486	B1	19970122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5069899	A	19911203	US 1989-430340	19891102
CA 2028069	AA	19910503	CA 1990-2028069	19901019
AT 147997	E	19970215	AT 1990-312021	19901102
ES 2099087	T3	19970516	ES 1990-312021	19901102
PRIORITY APPLN. INFO.:			US 1989-430340	19891102
			US 1990-551924	19900712

AB Antithrombogenic, **antimicrobial** compns. contg. heparin and/or

antibiotics reacted with **quaternary ammonium** compds. or ionic surfactants and bound with water-insol. polymers are disclosed. **Polyurethane** tubing was **coated** with a soln. contg. Me Et ketone 5.0, heparin-benzalkonium chloride 0.33, isopropanol 3.7, Et 3-ethoxy propionate 0.6, Bu acetate 0.5, nitrocellulose 0.16, Et acetate 0.1, and rosin ester 0.05 g. The tubings were dried and then tested for anti-clotting properties in human plasma.

L46 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:601111 HCAPLUS
DOCUMENT NUMBER: 115:201111
TITLE: **Microbicidal** polymers containing **quaternary ammonium** groups
INVENTOR(S): Hazziza, Judith; Nurdin, Nathalie; Helary, Gerard; Sauvet, Georges
PATENT ASSIGNEE(S): Derivery S. A., Fr.
SOURCE: Fr. Demande, 29 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2648676	A1	19901228	FR 1989-8344	19890622
FR 2648676	B1	19911004		

AB **Microbicidal** polymers are prepd. by grafting **quaternary ammonium** compds. to low-mol.-wt. vinyl polymers, by way of hydrosilylation, followed by polymn. leading to polyesters or **polyurethanes**. The polymers are used as adhesives, **films**, or granules. 1-Dimethylaminopropyl-1,4,4'-trimethyldisiloxane (prepn. given) was reacted with hydroxy-terminal polybutadiene in H2PtCl6.H2O-contg. hexane, followed by **quaternization** with octyl bromide and polymn. with diphenylmethane-1,4-diisocyanate, to give a **microbicidal** polymer.

L46 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:64023 HCAPLUS
DOCUMENT NUMBER: 114:64023
TITLE: **Microbicidal** silicone rubber particles containing **quaternary ammonium** salts
INVENTOR(S): Yoshida, Keiji; Hamada, Mitsuo
PATENT ASSIGNEE(S): Dow Corning Toray Silicone Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 393511	A2	19901024	EP 1990-107027	19900412
EP 393511	A3	19910313		
EP 393511	B1	19921111		
R: BE, DE, FR, GB				
JP 02274763	A2	19901108	JP 1989-96849	19890417
CA 2014506	AA	19901017	CA 1990-2014506	19900412

AU 9053284	A1	19901122	AU 1990-53284	19900417
AU 625904	B2	19920716		

PRIORITY APPLN. INFO.: JP 1989-96849 19890417

AB The title compns., useful in paints, rubbers, and cosmetics, contain cured silicon rubber particles (av. diam. 0.5-500 .mu.m) contg. 0.1-30% silyl group-contg. **quaternary ammonium** salt. Thus, a liq. mixt. of a di-Me siloxane diol, Me hydrogen siloxane, octadecyldimethyl[3-(trimethoxysilyl)propyl]ammonium chloride, and Bu2Sn dioctanoate was cured at 300.degree. to give silicone rubber particles. The particles, dispersed in PhMe, were mixed with a **polyurethane** paint with good **microbicidal** activity.

L46 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:140830 HCAPLUS
DOCUMENT NUMBER: 112:140830
TITLE: Manufacture of polyurethane-based artificial leather
INVENTOR(S): Nishimura, Takeo; Nakanishi, Shinji
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01239177	A2	19890925	JP 1988-64172	19880316
JP 06037755	B4	19940518		

AB Title leather with soft touch, smooth surface, resistance to hydrolysis, weather, and cracking by bending, and having good **antifungal** property, is prepd. by impregnating fibrous sheets with polyurethanes contg. soft segments of av. mol. wt. 400-4000 [e.g., polytetramethylene ether, polycaprolactone, polyvalerolactone, poly(.beta.-methyl-.delta.-valerolactone), poly(hexamethylene adipate)], contg. coagulation adjusters, e.g., C.gtoreq.8 alcs., alc.-modified silicones, polyoxyethylene alkylphenyl ethers, sorbitan fatty acid esters, then applied with polyurethanes contg. high alc. sulfuric acid esters, high alkyl sulfates, polyoxyethylene alkyl ethers, polyoxyethylene fatty acid esters, polyoxyethylenealkylamines, and alkyltrimethylammonium chlorides. A nonwoven fabric of 35:65 polyethylene (I)-PET blend was impregnated with a DMF soln. contg. a polyurethane (prepd. from polytetramethylene ether glycol 1200, polyethylene adipate glycol 800, MDI 1775, and ethylene glycol 378 parts) 12, stearyl alc. 1, and sorbitan tristearate 1.5%, **coated** at 70 g/m2 with a mixt. of the polyurethane 25, polyoxyethylene oleyl ether (II) 1, and DMF 74%, then 80 g/m2 with a mixt. of the polyurethane 16, TiO2 0.5, 2-ethylhexylsulfuric acid Na salt 1, II 0.5, water 1, and DMF 81%, coagulated with aq. DMF, dipped in hot toluene to remove I, and **coated** with a polyurethane finish **coating** to give an artificial leather having good appearance, soft touch, and crack resistance against bending.

L46 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:530768 HCAPLUS
DOCUMENT NUMBER: 109:130768
TITLE: Microporous waterproof **coatings**
INVENTOR(S): Towery, Donald R.; Hill, Berlie R.; Watson, Thomas F.; Triplett, Benny L.
PATENT ASSIGNEE(S): Burlington Industries, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8801570	A1	19880310	WO 1987-US2278	19870903
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US, US				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
US 5024875	A	19910618	US 1986-905135	19860909
AU 8779687	A1	19880324	AU 1987-79687	19870903
EP 323481	A1	19890712	EP 1987-906267	19870903
EP 323481	B1	19941207		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: US 1986-903130 19860903
US 1986-905135 19860909
WO 1987-US2278 19870903

AB Textiles having good water vapor permeability and waterproofing are prepd. by **coating** with org. polar solvent solns. of **polyurethane** rubbers, immersing the **coated** textiles in an aq. coagulating bath to ext. the solvents, washing, and drying. A compn. of Texthane 620C (urethane rubber) 47.8, Pluronic E 68 (nonionic surfactant) 3.8, 2% Carbopol 934 (acrylic resin thickener) in DMF 4.8, and DMF 43.6 parts was spaced on a polyester taffeta, washed, dried, and treated with a fluorocarbon-silicone water repellent to form a product showing moisture vapor transmission (Rm) 1533 g/m2-24 h, hydrostatic resistance (Ph) 138 Pa, and good machine laundry durability. Other examples showed **coatings** contg. **quaternary ammonium** compd. or Tinuvin 292 or mixt. of antimony oxide and hexabromocyclododecane giving good **antimicrobial** or UV-resistant or flame-retardant products, resp..

L46 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:137828 HCAPLUS
DOCUMENT NUMBER: 108:137828
TITLE: Antibiotic releasing polymers
AUTHOR(S): Solomon, Donald D.; Sheretz, Robert J.
CORPORATE SOURCE: Becton Dickinson Polym. Res., Dayton, OH, 45401, USA
SOURCE: J. Controlled Release (1987), 6, 343-52
CODEN: JCREEC
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Catheters with 2 different antibiotic **coating** systems were evaluated. The 1st was a simple **coating** of an antibiotic (dicloxacillin) complexed with a **quaternary** amine. The 2nd combined the latter with a **polyurethane** matrix. Both were **coated** onto **polyurethane** catheter substrates for testing. The objective of such systems is to deliver prophylactic antibiotic in high concns. to the vascular access entry site and to the surrounding microenvironment of the insertion tunnel. By using a Kirby-Bauer technique and measuring inhibition zone size, it was found that both **coating** systems were effective in inhibiting Staphylococcus aureus. However, the half-life of the catheter antibiotic activity for the antibiotic-polymer matrix was 100% longer (24 h vs. 12 h) than the simple antibiotic-complex **coated** catheters. In vivo s.c. mouse model studies confirmed in vitro results of

antimicrobial inhibition. The antibiotic relasing vascular access devices can decrease the potential for vascular access site infections.

L46 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:553876 HCAPLUS
DOCUMENT NUMBER: 101:153876
TITLE: Polyurethane foam impregnated or **coated** with fabric conditioning agent, **antimicrobial** agent, and anti-discolorant
INVENTOR(S): Pavlich, Mary J.
PATENT ASSIGNEE(S): Beecham, Inc., USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4460644	A	19840717	US 1982-453221	19821227
CA 1214302	A1	19861125	CA 1983-444117	19831222

PRIORITY APPLN. INFO.: US 1982-453221 19821227
AB Zn sulfate, sorbitol [50-70-4], or dextrose [50-99-7] is useful for inhibiting the discoloration of polyurethane foams impregnated with fabric conditioning agents and halide ion-contg. **antimicrobial** agents during storage of the foams prior to addn. to an automatic laundry dryer. Thus, a polyurethane foam was impregnated with a mixt. of Varisoft 137 47.76, Varonic 200MS (polyethylene glycol monostearate) 20.47, Zn sulfate 0.50, and an alkylbenzyldimethylammonium chloride 4.0 parts.

L46 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:408762 HCAPLUS
DOCUMENT NUMBER: 101:8762
TITLE: Bactericidal and antifouling properties of polymer **coatings**
AUTHOR(S): Marochko, L. G.; Kuznetsova, T. V.; Deinega, Yu. F.
CORPORATE SOURCE: USSR
SOURCE: Atmosferostoikie Lakokras. Pokrytiya Prognozirovanie Srokov Ikh Sluzhby, Mater. Semin. (1982), 95-8. Editor(s): Karyakina, M. I. Mosk. Dom Nauchno-Tekh. Propag.: Moscow, USSR.
CODEN: 51NIAP
DOCUMENT TYPE: Conference
LANGUAGE: Russian
AB The bactericidal and **fungicidal** activity of **quaternary** diammonium chlorides of fatty ester derivs. of ethylene-, hexamethylene-, and decamethylenediamines and Et3SnOH [994-32-1] in **polyurethane**, **polyurethane**-epoxy resin, polystyrene [9003-53-6], and polystyrene-epoxy resin latex **coatings** is discussed.

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TITLE: Polyurethane materials having **biocidal** properties
INVENTOR(S): Elmer, Otto C.; Duncan, Joe S.
PATENT ASSIGNEE(S): General Tire and Rubber Co.
SOURCE: U.S., 5 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3471423	A	19691007	US 1966-592260	19661107

AB A **quaternary ammonium** salt (contg. a saccharinate or cyclamate anion), which is a catalyst for the **polyurethane** reaction is added to a **polyurethane** prepolymer. The resulting cured polymer has **biocidal** properties and is used in millable rubber stocks, castings, sealants, adhesives, **coatings**, and thermoplastics. Thus, 400 parts poly(ethylene butylene adipate), 49 parts methylenebis(4-phenyl isocyanate), and 2.25 parts alkyl(dimethyl)benzylammonium saccharinate (HQ 3300) (I) were mixed to give a **polyurethane** gum stock which was heated 5 hrs. at 120.degree.. The stock (100 parts) was compounded with stearic acid 0.2, carbon black (FEF) 25, and 40% active dicumyl peroxide (DiCup 40-C) 4 parts and press cured at 160.degree. for 20 min. to give rubber samples with 325 psi. 100% modulus, 4050 psi. tensile strength, 520% elongation, and 64 Shore A hardness. These values were reduced on aging at 150.degree. for 200 hrs. but remained comparable with those of a similar rubber contg. no I. Both rubbers were **coated** with aq. dispersions of the **fungi** Aspergillus, Alternaria, and Penicillium and the bacteria Achrombacter and suspended over water at room temp. Samples contg. no I were heavily degraded with cracks and holes while the specimens with I contained only a few pinholes. The catalyst activity of I was better than that of laurylisoquinolinium saccharinate (II) (HQ 4330) and equiv. to ethylenediamine. Other **polyurethane** compns. used contained polytetramethylene glycol, 2,4-tolylene diisocyanate, and 4,4'-methylenebis(2-chloroaniline). Dimethyl(tetradecyl)benzylammonium saccharinate was also more effective than II and Me2Ph2N+Cl- as a catalyst for the reaction of BuOH with PhNCO in PhMe.